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AT DEADLINE

Monks resigns from ISS

Corporate governance leader Robert Monks, president of Institutional Shareholder Services, resigned to set up a shareholder advocacy firm, Institutional Shareholder Partners.

Nell Minow, ISS general counsel, has been named president of ISS, an institutional shareholder consulting firm.

Toy retailer may issue notes

Prudential Capital Corp. has designed an unusual $200 million private placement facility for Toys "R" Us. The retailer gets fast, easy access to medium-term, fixed- and floating-rate financing at market rates and a new base of potential investors.

The company may issue up to $200 million in medium-term notes any time in the next three years. Prudential would retain much of the debt. The balance would be sold through Prudential Asset Sales & Syndications.

Roley, Nichols acquired

Landerbank North America has agreed to acquire a majority interest in Roley, Nichols Capital Group Inc., the holding company for RNC Capital Management Co.

Landerbank North America is a subsidiary of Osterreichische Landerbank Aktiengesellschaft, Vienna's second largest bank. The acquisition will help both Landerbank and RNC create a global money management network, officials said. The transaction is expected to be completed in the fourth quarter; the price was not released.

Funds buy building

A limited partnership made up of the pension funds for Ameritech, Hughes Aircraft and Textron recently paid $38 million for the Madison Square Building, a 20-story office building in Manhattan's Midtown South area.

Schroder Real Estate Associates made the purchase on behalf of the partnership. The seller, Berisford Properties Ltd., New York, was represented by Julien J. Studley Inc.

Managers, custodian added

- The $53 million Wilmington (Del.) Pension System has hired three local managers, terminated one and reduced another's account.

Compu-Val Investments will manage $2.5 million in equities; Marvin & Palmer Associates, $6.5 million in equities; and Cypress Capital Management, about $7.5 million in fixed income.

An account with the Wilmington office of Loomis, Sayles was terminated and a fixed-income account managed by Delaware Trust of Wilmington was reduced.

- The $287 million Grinnell College endowment fund hired Northern Trust as master custodian, said David Clay, treasurer.

Northern replaces Bankers Trust Co., Des Moines.

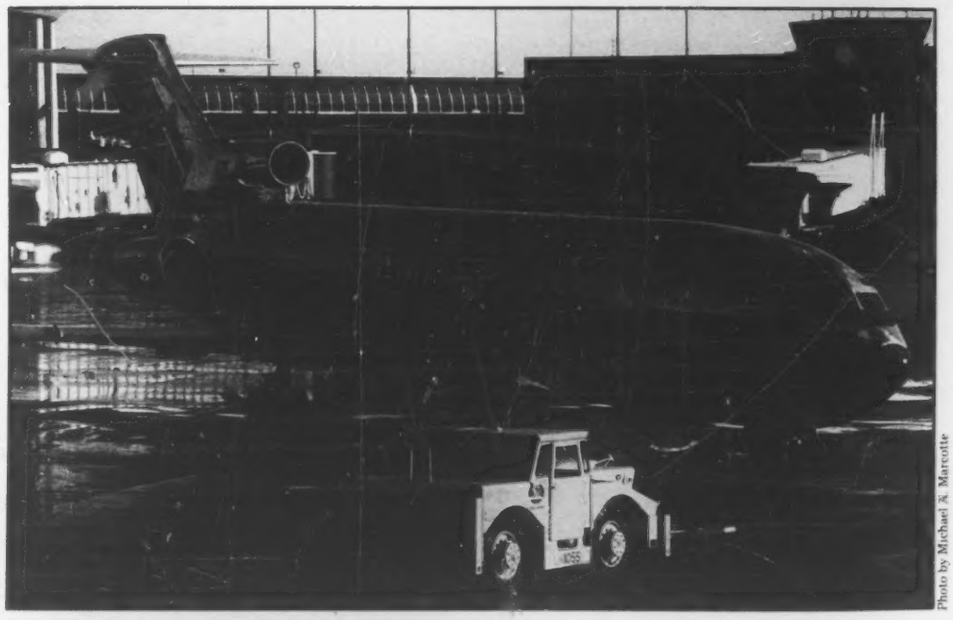


Photo by Michael A. Marrotte

The PBGC's experiences with Eastern Airlines' pension plans partly are responsible for the agency's quest for bankruptcy and pension law reform.

Deficit-fighters eye funds

Hikes in PBGC fees and reversion tax get serious look

By Joel Chernoff

WASHINGTON — Employers might shell out more dollars to the Pension Benefit Guaranty Corp. as a result of the budget-deficit package now being negotiated.

Meanwhile, a deal permitting transfers of surplus pension assets to retiree medical accounts and restricting asset reversions from terminated pension plans is in the works, and benefits experts believe it will be included in a final budget package.

In addition, whether or not asset reversions are hampered, some experts believe an increase in the excise tax imposed on reversions is inevitable. And a proposed securities transfer tax has not been included, in the face of heavy opposition by the securities industry.

"There definitely will be something on reversions and the excise tax," said Frank McArdle, manager of Hewitt Associates' Washington office.

Budget negotiators struggled last week to piece together a five-year, $500 billion deficit-reduction bill to avoid federal worker furloughs and other cutbacks from taking effect under the Gramm-Rudman-Hollings law Oct. 1.

But it appeared a compromise would emerge shortly, resulting in a package of spending cuts and tax hikes being assembled by mid-October. Legislators also would have to delay the effective date of Gramm-Rudman cuts and approve a continuing resolution to permit federal operations to continue.

Negotiators on the deficit-reduction package tentatively have agreed to a $65 million annual increase in revenue from the PBGC, which insures defined benefit pension plans, sources said.

James A. Lockhart III, the PBGC's executive director, said if a premium hike is included in the package, the agency would want most of the burden to be absorbed by companies with underfunded pension plans. There now

See **Deficit** *on page 63*

Bondholders get some respect

By Marcia Parker

Corporate executives and boards of directors are being urged to change how they deal with company bondholders and their views of their limited obligations to them.

If these ideas take hold, the impact will be far reaching, putting equity and debtholders on a more equal footing and inevitably leading to conflicts over their often clashing interests.

Bankers, lawyers and others who advise companies have warned executives to examine their future debt obligations and open a dialogue with bondholders in case the company falters and they find themselves face to face at the bargaining table during a restructuring.

There are other reasons to change the way companies deal with debtholders. Growing bondholder activism, especially in workouts; the emergence of the "debt raider;" concerns about the still ailing junk bond market; and fear of recession and inflation should convince corporate executives it's time to stop treating bondholders like second-class citizens.

The need for a new era in bondholder relations was the focus of a conference in mid-September designed to alert corporate executives to the vulnerabilities posed by their debt obligations and to explore the strategic options available to them. It was sponsored by Fried, Frank, Harris, Shriver & Jacobson, a leading New York law firm, and Georgeson & Co. Inc., a big proxy solicitation and investor relations adviser in New York. Both firms provide advice to companies and bondholders.

Companies often have hundreds of bondholders, including dozens of banks. "Often companies don't know who owns their paper," said Wilbur Ross, senior managing director at Rothschild, Inc., a New York advisory firm.

See **Respect** *on page 61*

Benefits to cost GM $1.4 billion

By Trudy Ring

DETROIT — General Motors Corp.'s new contract with the United Auto Workers will cost the company $1.46 billion for enhanced pension benefits, the union says.

Other contract provisions, however, will allow GM to operate more efficiently, so there will be a trade-off for the increased pensions, auto industry analysts say.

The contract likely will set the pattern for the U.S. auto industry, but Ford Motor Co., Dearborn, might prefer a different benefits agreement, while Chrysler Corp., Highland Park, might find the pension provisions a handicap, according to analysts.

GM and UAW negotiators tentatively agreed to the three-year contract in mid-September; UAW members were to finish voting on it by Sept. 30.

A newsletter circulated by the UAW to its members put the cost of the pension enhancements at $1.46 billion. "That sounds like the right order of magnitude" for the life of the contract, said Gerry Bell, partner and actuary with Kwasha Lipton, Fort Lee, N.J., a firm with no connection to GM or the UAW.

Both GM and the UAW declined comment on the matter, as did the actuarial firms they use — The Wyatt Co. for GM and Martin E. Segal Co. for the UAW.

Mr. Bell said the figure sounds right because of the increases in both current service cost and past service liability that GM appears likely to incur. He added, however, it's hard to be precise about how the $1.46 billion will be divided among these costs.

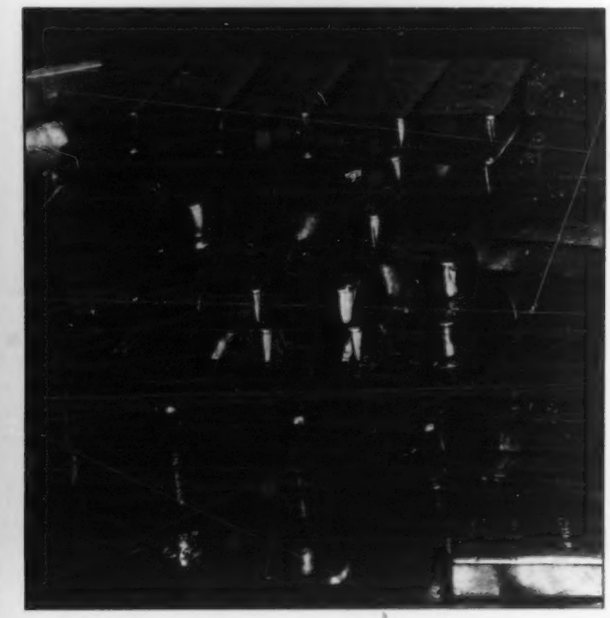
The contract features pension improvements for both future and current retirees. For future retirees, the "30-and-out" pension — an early retirement supplement for persons who retire before age 62 with 30 or more years of service — will go to $1,800 from $1,500 a month during the three-year life of the contract.

Basic pension benefit rates also will be raised for both current and future retirees. For persons who retire on or after Oct. 1, basic benefits will be increased $4.45 a month per year of credited service over the life of the contract. For those who had retired previously, the rate will increase anywhere from $1.25 to $4.10 a month per year of credited service, with the increase varying according to when they retired and what their basic benefit rate was before.

It's unlikely GM would change its rate of return assumption or investment strategy significantly on account of the new contract, Mr. Bell said. In the past, some companies tried to pay for benefit

See **UAW contract** *on page 61*

NEWS DIGEST



Gold may be precious to some, but institutional investors generally don't include the shiny metal in their investment portfolios. Page 51.

SPECIAL REPORT: MASTER TRUST/GLOBAL CUSTODY

The largest banks captured an even greater portion of master trust and custody assets in the past year, as global custody accounts fueled business growth. Also, pension officials seem satisfied with the fees charged. Page 25.

FINANCING

Oryx Energy's stock offering hinges on the acceptance of the company's debt load. Page 3.

INTERNATIONAL

British pension funds continue to lower their exposure to fixed-income and realty investments. Page 52.

REAL ESTATE

Trammell Crow's plan to transfer properties to TIAA-CREF in lieu of loan payments has sparked a suit. Page 2.

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"Third class mail enclosed" bulk rate U.S. postage paid Crain Communications — third class enclosure is included in edition 02 — but not in edition 01 or 03.

Something old, something new

One survey is winding down while another is just under way. This is the final call for responses to *Pensions & Investments'* annual investment management consultants directory; the deadline is Oct. 14. The questionnaires for the profiles of the largest pension funds, however, were mailed Oct. 1 to more than 1,400 pension executives; that deadline is Nov. 11. If you have any questions regarding either directory, call Christine Philip, directory coordinator, at (312) 649-5217.

Trade costs escape notice

Most executives unaware of how commissions are used

By Joel Chernoff

Pension executives' scrutiny of their trading costs is only skin deep.

Despite admonitions by the Department of Labor that pension executives monitor their trading costs, a new survey by the Callan Investments Institute, San Francisco, reveals the executives do little probing of how brokerage commissions are used.

Nearly 80% of pension executives don't know or haven't asked their money managers how they use commissions, the survey showed, and more than half don't have a formal soft-dollar policy.

The survey results come at a time of increased pressure from some quarters for more information about the use of commissions and soft dollars.

"I think this is going to be an explosive issue," said Dexter Earle, partner, Goldman, Sachs & Co., New York. Goldman and Morgan Stanley & Co., New York, urged Labor Secretary Elizabeth H. Dole earlier this year to take a tougher line on soft-dollar trades.

In addition, the Securities and Exchange Commission has promised to review the overall soft-dollar questions, including the impact on market liquidity and volatility, later this year. The SEC might push for greater disclosure by investment managers.

According to the survey, while only 21% of money managers provide clients with a breakdown of how they spend commissions, many said they would provide a breakdown on request. Few pension executives, however, appear to take advantage of this offer.

Callan also found only 44% of pension executives — and 51% of money managers — have a formal soft-dollar allocation policy.

Even then, the difficulties inherent in measuring transaction costs — especially elusive market-impact costs — cause executives to paper over the issue.

"Most of the soft-dollar policies are just a superficial statement to satisfy government regulators," said Ken Brunke, senior vice president of Callan Associates Inc. and executive director of the Callan Investments Institute, Chicago.

Trading experts believe trading cost issues are just beginning to heat up.

"Why aren't people more concerned about these issues?" asked Laszlo Birinyi Jr., president of Birinyi Associates Inc., New York. Commissions have a significant impact on manager performance but are considered of secondary importance, he said.

Meanwhile, the survey of 304 pension executives and 163 money managers found brokerage directed by pension executives still is on the rise. The survey was conducted in December 1989 but released recently.

More than 56% of the pension executives surveyed direct bro-

See **Commissions** *on page 63*

Suit seeks to halt transfer

Crow tries swap of realty for debt

By Terry Williams

MINNEAPOLIS — A former Trammell Crow Co. executive is suing several company executives to stop the transfer of a building to the Teachers Insurance and Annuity Association — College Retirement Equities Fund.

Kirtland C. Woodhouse, a former managing director of Trammell Crow's Minnesota operation, said he is trying to block the company's plans to deed a suburban Minneapolis office building to TIAA-CREF as settlement for a mortgage on which the developer defaulted.

The suit was filed Aug. 20 in Hennepin County Court, Fourth Judicial District, Minneapolis.

Named as defendants in the lawsuit are Harlan R. Crow, son of the company founder, and James McDonald Williams and Joel C. Peterson, managing partners.

Mr. Woodhouse alleges if 8400 Normandale is deeded to the pension fund, he will lose his almost $1.5 million equity stake in the office building, which is owned by Normandale Lake Office Center Limited Partnership, a Trammell Crow partnership of which Mr. Weedhouse is a partner.

In all, Trammell Crow wants the partnership to deed four office buildings and sell another one at a discount to TIAA-CREF in exchange for forgiveness of loans on which the developer defaulted, Mr. Woodhouse alleges.

Trammell Crow is willing to deed over these buildings to preserve lending commitments on other projects from TIAA-CREF as well as its relationship with the giant pension fund, he contends in the suit.

Mr. Woodhouse's suit alleged TIAA-CREF indicated it would stop all pending loan commitments with Trammell Crow if the fund didn't receive the 8400 Normandale property and it was forced to foreclose on three other properties.

The suit maintains Mr. Woodhouse "has no interest in these (pending) projects and stands to gain nothing by trading his equity in the 8400 Normandale property for (the fund's) continued goodwill toward the Crow organization.

See **Transfer** *on page 62*

Early retirement options likely

By Hillary Durgin

WASHINGTON — Early retirement incentive programs will survive under anti-age discrimination legislation passed by the Senate last week.

The revised Senate bill, which affects how employers design their benefit programs for older workers, will not give employers carte blanche in developing those plans, but will grant them far more freedom than earlier versions of the bill.

The bill, S. 1511, now moves to the House for consideration. The House is expected to review the legislation this week.

Early retirement options cut personnel costs for employers and are a key to an early exit for workers.

"Unless (the plans) are a subterfuge to get rid of older employees, we think they'll be 'consistent with the relevant purpose of the act,' and that is to allow employees to retire with a choice," said John F. Woyke, principal with TPF&C, Valhalla, N.Y., referring to the wording adopted by the Senate.

After more than a year of de-

Sen. Orrin Hatch is one of the sponsors of the anti-age discrimination bill.

bate over legislation that Democrats argued was vital to prevent discrimination against older workers, but which Republicans charged would compound benefits costs, the Senate Sept. 24 approved a fifth version of the legislation, by a vote of 94 to 1.

The bill, the Older Workers' Benefit Protection Act, was offered as a substitute to a more restrictive version approved last March by the Senate Labor and Human Resources Committee. The substitute measure was offered by Sens. David Pryor, D-Ark.; Orrin G. Hatch, R-Utah; Howard M. Metzenbaum, D-Ohio; John Heinz, R-Pa.; and Jim Jeffords, R-Vt.

With time running short until Congress adjourns for the year, House members face considerable pressure to vote on the legislation this week. Despite lingering concerns among employer and older workers' groups over provisions of the Senate compromise, the House is expected to accept the

See **Retire** *on page 62*

GE Investments

Worldwide Diversified Money Management Services

Henkel goes abroad

Foreign foray part of diversification plan

By Lori Miller

GULPH MILLS, Pa. — The $125 million pension fund of Henkel Corp., the U.S. chemical company affiliate of Henkel KGaA of Germany, is making its first venture into the international arena.

Henkel hired two managers to invest 12% of the pension fund's assets in international equities. G.T. Capital Management, San Francisco, and Murray Johnstone International Ltd., Chicago, were hired to manage $7.5 million each, said James Ripka, treasurer.

Henkel also hired three domestic fixed-income managers: MacKay-Shields Financial Corp., New York, and Consistent Asset Management Co., Chadds Ford, Pa., will manage $10 million each; and Philadelphia-based Right Time Econometrics, will manage $500,000, according to Mr. Ripka. Right Time, a small, quantitative manager, was hired as a test.

Mr. Ripka said Henkel decided to invest internationally to achieve diversification and higher returns.

The company, which has grown largely by acquisition since 1960, recently acquired several chemical companies, and their pension fund assets were combined with Henkel's assets.

Henkel decided last year to invest internationally, but had to postpone the move until assets became available.

The move to international investing will affect only Henkel's equity allocation. Before hiring the new managers, the fund had 58% of its assets invested in domestic equities, 30% in fixed income, 6% in real estate and 6% in cash. The new asset mix is 46% in U.S. stocks and 12% in international equities; the others are unchanged.

The five new managers are being funded through maturing guaranteed investment contracts and the termination of a manager Mr. Ripka declined to identify.

Rich Gleason, vice president, consulting services division at Shearson Lehman Brothers Inc., the pension fund's consultant, said Henkel's decision to move away from GICs will allow company executives "to know exactly what their underlying securities are" and will give them "better control over the credit quality of their portfolio." ■

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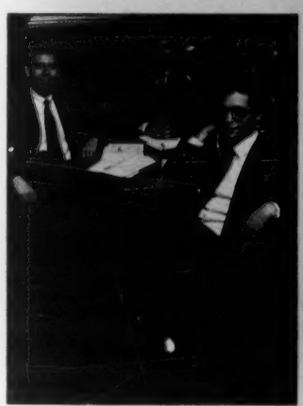
CORRECTIONS & CLARIFICATIONS



• A caption in the Sept. 3 issue misidentified executives of **International Risk Control Inc.**, Redwood City, Calif. Pictured in the photo above are, from left, Scott Silver, Jerome Behar and Joshua Sommer.

• A photo caption in the Sept. 17 issue should have said **Rep. Henry B. Gonzalez** opposes federal pass-through insurance protection for pension assets deposited in banks.

• In the Sept. 17 issue a chart ranking private placement agents was misidentified. The correct heading is, **Leading Agents/Advisers of Private Placements**.

FINANCING

Latin American entrepreneurs keep faith with backers

■ While many Latin American governments are struggling to make interest payments — never mind principal repayments — on their loans from foreign banks, entrepreneurs in those countries are proving themselves worthy credit risks.

ACCION International's Bridge Fund — through which endowments, foundations, churches and individual investors are financing struggling local entrepreneurs in Latin America — boasts a repayment rate of 98%.

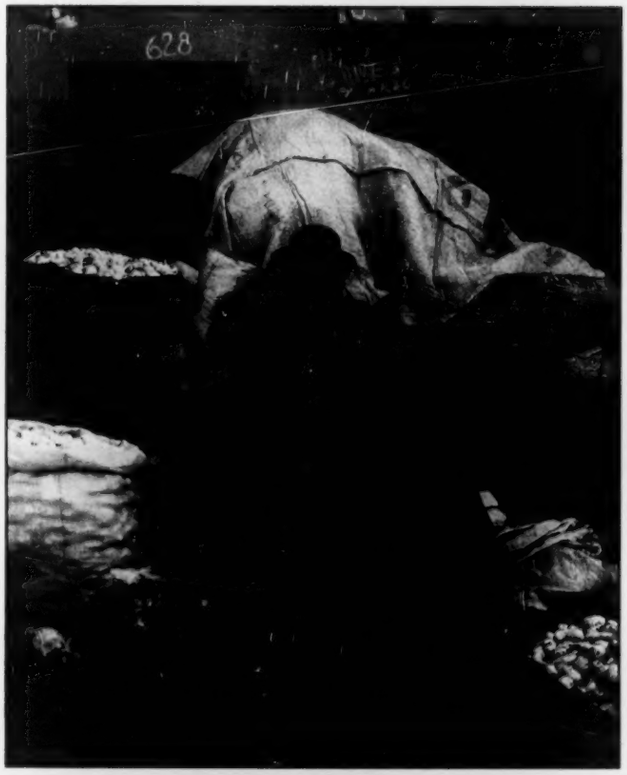
Investments in the fund have just reached more than $2 million.

"Since the Bridge Fund was founded in 1984, there has not been a single default. The self-employed poor in Latin America are paying back their loans at a rate far superior to their nations' governments and private banks," ACCION International, a private non-profit organization based in Cambridge, Mass., said in a statement.

U.S. investors have purchased certificates of deposit underwritten by Chemical Bank, New York, and South Shore Bank, Chicago, through ACCION that then are used as guarantees for banks in Latin America to lend to the smallest-scale entrepreneurs in low-income communities.

Why take a chance on financing the down and out?

"Our investors are people who have sort of struggled themselves," said Deborah Drake, director of capital formation.



Latin American entrepreneurs are proving good credit risks to the investors who funded them through ACCION.

PRIVATIZATION

Investors, governments may 'marry'

■ Privatization might become the next hot investment area.

State and local governments need cash to rebuild their ailing infrastructures while Eastern European countries hunger for outside capital to reconstruct their sagging economies.

U.S. infrastructure needs alone are expected to cost between $1 trillion and $3 trillion during the next 20 years, while the total U.S. public works budget for 1989 was only $95 million, said John Stainback, president and chief executive officer of Privatization International Inc., a new advisory firm.

The firm wants to marry governmental financing needs with institutional investors' sizable assets, Mr. Stainback said.

The Washington-based firm hopes to aid governments spin off public services and operations in a variety of public-private partnerships: helping to sell off state-owned enterprises, developing real estate, rebuilding the nation's infrastructure and providing public services, such as waste collection.

Therein lies a great opportunity for institutional investors, who can take advantage of inefficiencies in the market, he said. His firm plans to develop a family of funds to invest in privatization opportunities. Public pension funds, already pressured to promote local development, could be natural investors.

Deals would be structured much like leveraged buy-outs, with several tiers of financing.

Privatization International has been named adviser to the U.S. Military Academy at West Point, N.Y., on restructuring its real estate assets to help finance a $500 million building project. West Point, which owns raw land along the Hudson River, is $300 million short of its financing needs.

The firm also is negotiating with the County of Albany, N.Y., for the lease/acquisition of the 18,500-seat, $76 million Knickerbocker Arena.

ENDOWMENTS

Maryland college retains manager

■ The $50 million University of Maryland System Endowment Fund has renewed its contract with Alex. Brown Investment Management, Baltimore, to manage a $37 million active equity portfolio, said David M. Forman, a university accountant.

The search was prompted by the expiration of Alex. Brown's five-year renewable contract. The endowment has had a similar contract with its fixed-income manager, T. Rowe Price Associates, Baltimore, and that $13 million contract is under review.

PEOPLE

Professional flips over research

■ What do martial arts and quantitative investment research have in common?

Just ask Michael Even, senior vice president and director of quantitative research at Independence Investment Associates Inc., Boston, and a black belt in Tae-Kwon-Do. Mr. Even was profiled in the firm's monthly newsletter "Independent Thought" as the firm's "Karate Kid."

"I like combining theory and philosophy in practical applications. At Independence that means translating new investment ideas into products for our clients. It's like Tae-Kwon-Do, where we connect an ancient philosophy with practical self-defense and exercise," Mr. Even said in the profile.

It remains to be seen what Independence's research gains from the Cornell University graduate's other avocations — bicycle touring, windsurfing and snow skiing.

THE COURTS

Judge is tough on fund trustees

■ U.S. District Court Judge Thomas E. Scott used some harsh words in relieving trustees of their investment duties for the Pompano Beach, Fla.-based Operating Engineers Local 675 pension and welfare funds.

In his Aug. 28 order, the judge found "the funds' investment policies are inappropriate, inadequately diversified and lack the requisite security which the funds must achieve."

The pension fund is 95% invested in real estate and lacks cash to pay out benefits, according to Labor Department allegations. Assets from the welfare fund were used to pay retirement benefits, the government also charged (*Pensions & Investments*, Aug. 6).

In appointing a receiver to handle the real estate investments and a special independent counsel to oversee the funds' administration, the judge ordered the trustees and other persons from "transferring, selling, assigning, dissipating, concealing, offsetting, seizing, withdrawing, encumbering, hypothecating, mortgaging, pledging, impairing, converting, wasting or otherwise disposing of, in any manner whether tangible or intangible, the assets of the pension fund and the welfare fund."

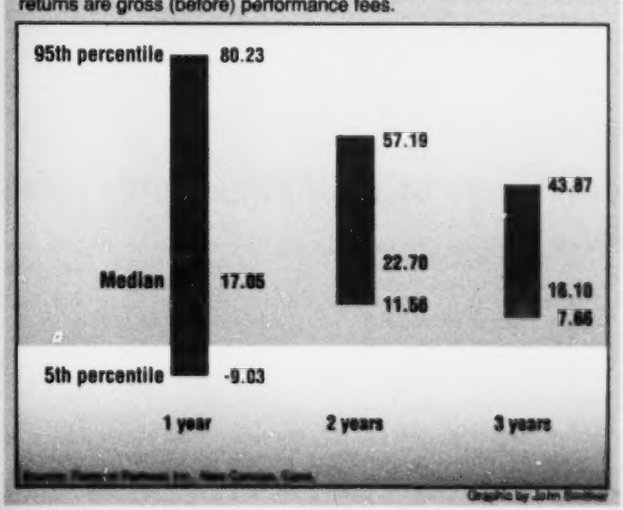
The judge further ordered trustees and others from "altering, destroying, concealing or otherwise disposing of, in any manner, directly or indirectly, any financial, business, or personal records, or any other document concerning or relating to the pension fund and the welfare fund or their assets."

Is that clear?

Tremont universe of limited partnerships

(Periods ended June 30)

Returns for periods greater than one year are annualized. Investment returns are gross (before) performance fees.



Additions to Bassett Center mall are on hold, but the lender — Teacher Retirement System of Texas — has been patient so far.

REAL ESTATE

Texas Teachers keeps a cool head

■ Washington real estate investor Conrad Cafritz's financial troubles so far have not hurt The Teacher Retirement System of Texas, which is owed $55.3 million by the Cafritz-Schonberger Group.

Last year, the $24 billion Texas Teachers fund provided a $59 million participating mortgage on Bassett Center, a regional mall in El Paso, Texas, purchased by the developer (*Pensions & Investments*, Dec. 12).

While cash flows still are solid from the mall investment, which is about 85% to 90% leased, Mr. Cafritz's financial problems will hamper his ability to make capital improvements, said Joe Perrone, chief investment officer.

Cafritz-Schonberger planned to make sizable additions to the mall. But now, Mr. Cafritz, who has liabilities of $1.1 billion and assets worth $754.5 million, reportedly is struggling to avoid a bankruptcy filing and is seeking permission from his lenders to sell or refinance his holdings by the end of 1993.

The question is whether Mr. Cafritz's lenders will be patient. Mr. Perrone, who noted Mr. Cafritz has been very candid about his money problems, said, "I've met the man. I think very highly of him."

VENTURE CAPITAL

Fund will focus on 'underserved' Southeast U.S.

■ A new venture capital fund will focus on the Southeast, an area the partners say is underserved by venture capital.

The fund, Cooper Davidson Investment Fund I L.P., Atlanta, is seeking to raise at least $20 million. To date, it has drawn commitments totaling $8 million from pension funds and wealthy individuals. James W. Davidson, executive officer of the fund, declined to identify the investors.

Mr. Davidson plans to leave his post as vice president of Goldman, Sachs & Co., New York, to devote full time to the fund. For Goldman, Sachs, he has worked with many clients in the Southeast, he said. The fund's other executive officer is Frederick E. Cooper, a lawyer with Jones, Day, Reavis and Pogue, Atlanta, and former president of Flowers Industries Inc., Thomasville, Ga. Mr. Cooper will cut back to part time at the law firm. The fund will have offices in Atlanta and Miami.

Despite the economic growth in the Southeast in the past few years, venture capital investment in the region has been limited, Messrs. Davidson and Cooper said.

Therefore, they plan to make a large portion of their investments there. They will seek companies in various stages of development and in various industries.

The fund will close later this year, Mr. Davidson said.

MONEY MANAGEMENT

UAM continues its buying binge; 2 more enter fold

■ United Asset Management Corp. has acquired Newbold's Asset Management Inc., Bryn Mawr, Pa., and Cambiar Investors Inc., Englewood, Colo.

With the acquisitions, UAM now owns 24 investment management firms that manage about $41 billion. Newbold's runs about $4.4 billion, largely tax exempt, and Cambiar manages about $400 million, of which 80% is tax exempt.

UAM paid about $40.4 million for Newbold's, an industry source said. No estimate of the price of Cambiar was available, but the source said money management firms tend to sell for between 1% and 2% of assets under management, with equity managers toward the higher end of the range.

Newbold's is an active equity and balanced manager. Its equity approach emphasizes low price-earnings ratios, while its fixed-income approach is passive. Cambiar, an active equity manager, focuses on growth and low price-earnings stocks.

As with other firms acquired by UAM, each will maintain its own investment philosophy and autonomy in operations, UAM officials said. Newbold's was a subsidiary of Provident Mutual Life Insurance Co., Philadelphia, and will continue as investment adviser to several Provident Mutual accounts. Cambiar was owned by its principals.

FINANCING

Recession would cast a wide net

■ Non-financial corporations — particularly in non-durable goods and trade sectors — would have a tough time coping with their debt burdens in a recession, a Merrill Lynch Capital Markets report concludes.

Corporate cash flow has fallen sharply after peaking in the fourth quarter of 1988, while net interest payments have continued to increase.

As a result, the debt servicing capacity of corporate borrowers deteriorated sharply in 1989, according to a report by Robert Schwartz, Merrill's senior financial economist.

Until then, a healthy increase in cash flow during the economic expansion of the decade had enabled non-financial corporations to meet their explosive 70% increase in interest payments since the end of 1982.

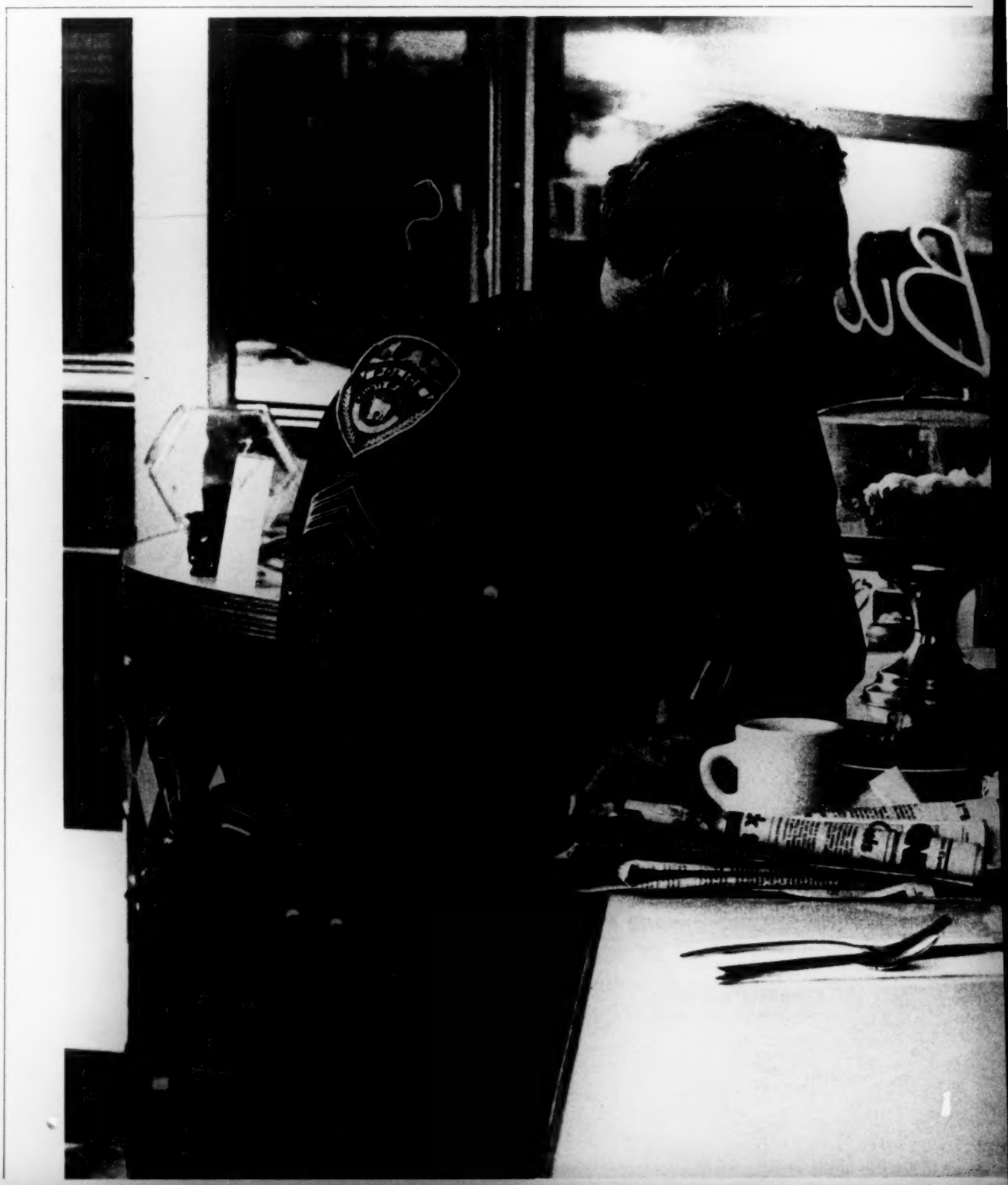
"Whether or not the economy is on the verge of a recession, corporate profits are already at recession levels and balance sheets are under considerably more distress than they were just prior to past postwar recessions," the report said.

"Corporations had less cash flow to cover interest payments in 1989 than during any of the four recessionary periods since 1960," the report said.

Interest burden by major industry in recessions
(non-financial corporations)

Industry	1960-'61	1969-'70	1973-'75	1980-'82	Net interest payments 1989 ($ bils.)
Manufacturing	2.1	14.5	14.8	16.6	$38.4
durable goods	2.3	17.5	18.5	21.7	8.1
non-durable goods	1.9	11.6	11.7	13.5	30.2
Trans. & utilities	21.2	29.9	34.9	37.0	40.8
transportation	16.5	22.0	21.2	20.1	5.0
communication	15.9	25.3	28.3	27.3	10.7
elec. & gas	27.7	40.4	50.7	54.3	25.1
Wholesale trade	7.8	14.0	13.7	23.9	7.3
Retail trade	4.2	18.5	23.0	27.4	11.9
Mining	0.0	10.1	13.1	42.8	2.5
Construction	5.2	5.3	15.9	9.5	2.0
Total*	7.5	18.5	20.8	23.9	102.8

Source Merrill Lynch Capital Markets, New York
* Excluding services and agriculture



Global custody leads pack

Larger banks are biggest winners domestically

By Trudy Ring

Global custody continued to be the growth area for master trust and master custody banks in the past year, while concentration of domestic assets among the largest banks became greater.

Global custody assets held for tax-exempt U.S. institutions grew 7.1%, to about $111.2 billion from about $103.9 billion, in the 12 months ended June 30. These figures represent both assets held directly and those held through third-party global networks.

Domestic master trust and master custody assets, in contrast, grew just 5.6%, to $1.9 trillion to from $1.8 trillion.

Global custody growth is attributable to the increased international commitment by institutional investors; those investing overseas must have a global custodian.

"Clients who have existing investments internationally have increased them," said Jay Carty, senior vice president and director of marketing at Boston Safe Deposit and Trust Co. One client, the $56 billion California Public Employees' Retirement System, alone added $3.1 billion in international investments in the past 12 months.

Also, there still are pension funds and other institutions making overseas investments for the first time.

Global custody growth is likely to continue, said Jennifer Kamp Cameron, vice president of The Northern Trust Co., Chicago. Some institutions have put their international investment plans on hold because of the Mideast crisis, but they are not in the majority, she said.

Offering global custody capabilities can give a bank an edge in attracting domestic master trust and master custody business, she added.

In global custody, however, there is a different selection of providers; some firms, like Morgan Stanley Trust Co. and Brown Brothers Harriman & Co., are players in global custody but not domestic master trust and custody.

On the domestic side, business is becoming more concentrated among the top banks. Among the 10 largest banks, domestic master trust and master custody assets grew 8.7%. Among the five largest, assets grew 18%. The top three providers of master trust/custody services were the same ones that filled those slots last year — State Street Bank and Trust Co., Bankers Trust Co. and Northern Trust. Northern Trust had the most new business for the year, with $25.6 billion.

Master trust profiles	28
Global custody profiles	40

Boston Safe moved into the fourth slot from sixth, while Chase Manhattan dropped to fifth from fourth. Mellon Bank moved up to sixth from seventh, while Bank of New York dropped to seventh from fourth, due largely to fallout from its takeover of Irving Trust Co. (*see related story on this page*). Citibank remained eighth; Security Pacific Bank moved up to ninth from 11th and Harris Trust and Savings Bank to 10th from 12th. Manufacturers Hanover Trust Co., with a 59% drop in assets, fell to 16th from ninth. A Manufacturers Hanover official, however, said last year's number likely included taxable assets.

The concentration among the largest banks came about in the past few years, as many institutions have moved their master trust or custodial relationship to one of the major providers from a regional bank.

Many middle-market pension funds may had long-standing relationships with regional banks but found they could not get the same type of master trust services, said David Willour, group managing vice president at Chase Manhattan Bank, New York. This factor also opens opportunities for the top-tier banks to provide private-label services for the regionals, he said.

Generally, when a bank gets new master trust or master custody business, it's taking the business away from someone else, said Tim Keaney, vice president-sales and marketing at Mellon Bank, Pittsburgh. "A commonly used statistic says that seven out of eight master trust competitions are takeaway competitions," he said.

With the increased concentration, banks need to distinguish themselves by offering services beyond the basics, said Carter Reynolds, senior vice president of Bankers Trust, New York. These include a wide range of cash management alternatives, performance measurement and analytical services, she said.

Prior business relationships, such as in commercial banking or investment management, also help banks attract master trust and custodial clients, Mr. Carty added.

Overall, the intense competition among the top-tier banks is advantageous for fund sponsors, making it a buyer's market, Mr. Keaney said.

While global custody remains more of a growth area than domestic master trust and custody, it likely will become more of a buyer's market in the near future, because of enhanced competition, Mr. Willour added.

According to *Pensions & Investments'* master trust survey, master trust assets grew more than master custody in the 12 months ended June 30, in contrast to the past few years. Master trust

See **Custody** *on page 47*

Master trust/custody banks ranked by U.S. tax-exempt assets
U.S. $ mils.

Firm	Total	Master trust	Master custody
State Street	286,635	135,208	151,427
Bankers Trust	241,600	181,000	60,600
Northern Trust	201,602	110,664	90,938
Boston Safe Deposit	152,278	54,161	98,117
Chase Manhattan	148,400	71,900	76,500
Mellon Bank	140,219	123,056	17,163
Bank of New York	122,605	56,128	66,477
Citibank	92,314	32,118	60,196
Security Pacific	70,000	20,000	50,000
Harris Trust	52,026	49,248	2,778
CoreStates Bank	41,736	4,638	37,098
First Wachovia	38,099	30,432	7,667
Citizens & Southern Trust	35,300	20,600	14,700
NBD	35,145	12,904	22,241
Chemical Bank	28,754	3,833	24,921
Manufacturers Hanover	27,700	25,500	2,200
Mfg. Nat'l Detroit	23,449	18,884	4,565
United States Trust	20,900	15,500	5,400
Continental Bank	19,838	14,176	5,662
Wilmington Trust	19,427	19,094	333
Boatmen's Trust	18,482	2,177	16,305
Bank of America	18,100	2,100	16,000
Ameritrust	13,833	4,788	9,045
First Interstate/California	12,000	5,000	7,000
LaSalle Nat'l Trust	9,557	1,054	7,503
First Trust	5,727	5,128	599
Norwest Bank Minnesota	4,500	3,300	1,200
Bank of Boston	4,445	1,845	2,600
First Wisconsin	4,035	2,106	1,929
Marshall & Ilsley Trust	3,600	1,700	1,900
Trust Co. Bank	3,063	1,518	1,545
Marine Midland	3,000	2,000	1,000
Security Trust	2,948	969	1,979
Connecticut Bank & Trust	2,161	1,600	561
Bank of Oklahoma	1,938	1,938	—
First Nat'l/Chicago	1,695	739	956
Comerica	1,375	—	1,375
Hibernia Trust	1,335	287	1,048
Bank IV	892	659	233
BayBanks	714	228	486
Crestar Financial	164	93	71
First Interstate/Wash.	120	120	—
Total	1,910,711	1,038,393	872,318

Survey finds execs satisfied with fees

By Fred Williams

Pension fund executives gave Manufacturers National Bank of Detroit the highest rating in overall customer satisfaction for master trustee banks in *Pensions and Investments'* biennial master trust survey.

The biennial survey of 1,200 plan sponsors also found master trust fees are not viewed as excessive; more than three out of four plan sponsors (76.4%) said their trust fees are average. Only 5.2% said they believe their trustee fees are high.

Pension executives were asked to rate their master trust banks on a scale of 1 (poor) to 5 (excellent) in several categories: personnel, reporting capabilities, systems capability, service orientation, online capabilities and overall satisfaction.

Manufacturers National received a 4.5 in overall satisfaction, and placed highest in the personnel (4.75) and "other services" (4.5) subcategories.

Behind Manufacturers National in overall satisfaction were Mellon Bank, Pittsburgh, with 4.33 and U.S. Trust, New York, with 4.25. Mellon Bank was the top master trustee in the 1988 survey.

Mellon, however, ranked No. 1 in overall satisfaction in the global custody area. The bank also ranked tops in all of the global subcategories — settlement, dividend and interest posting, foreign exchange, country coverage, tax reclamation, accuracy of reporting and overall performance satisfaction.

While Manufacturers National and Mellon were rated highest, neither received the top rating of 5 and no bank received a perfect rating in any of the subcategories.

Mellon received a perfect 5 rating overall in the 1988 survey of master trustees.

The Northern Trust Co., Chicago, followed Mellon in the overall satisfaction category for global custodians with a 3.7, while Chase Manhattan Bank, New York, received a 3.6.

The survey indicated 16% of plan sponsors pay trustee fees at the corporate level while the vast majority, 84%, pay trustee fees at the plan level.

In the master trust personnel category, Continental Bank, Chicago, and U.S. Trust, New York, both followed Manufacturers National Detroit with a 4.5. Mellon

See **Survey** *on page 47*

Sponsors' global custodian satisfaction*

	Rating	No. of responses
Mellon Bank**	4.1	10
Northern Trust	3.7	22
Chase	3.5	12
Bankers Trust	3.4	14
Mitsubishi	3.4	5
NBD	3.3	3
State Street	3.3	16
Boston Safe	3.0	8
Harris Trust	3.0	3

* includes global custodians with three or more responses
** includes reponses for Mellon Pictet

Overall ranking of master trust banks by pension fund sponsors*

	Rating	No. of responses
Man. Nat'l/Detroit	4.5	4
Mellon Bank	4.33	21
U.S. Trust	4.25	4
Boston Safe	4.16	19
Northern Trust	4.12	49
NBD	4.1	10
Bankers Trust	4.06	35
First Wachovia	4	10
NCNB	4	7
State Street	3.97	31
Citibank	3.83	6
Continental	3.83	6
Bank of N.Y.	3.75	16
Harris Trust	3.71	17
Mercantile Safe	3.67	3
Chase	3.62	21
Security Pacific	3	5

* does not include banks with fewer than three responses

Different outcomes

Client response varies in trust mergers

By Margaret Price

A look at two separate bank mergers illustrates the nature of pension funds as master trust and custody clients.

In one — the unfriendly takeover of Irving Trust Co. by Bank of New York in 1989 — some master trust and custody clients uncomfortable with the fight defected, mostly right after the merger. In the other — the late 1988 merger of Boatmen's National Bank of St. Louis and Centerre Trust Co. — customers remained unruffled.

Officials of both surviving banks (Bank of New York and Boatmen's) now claim the mergers produced the expected advantages: economies of scale, bigger size, streamlined and enhanced operations and expanded market bases leading to higher revenue.

They also stress any dust has settled. In Boatmen's case, it apparently has. But for Bank of New York, the acquisition of Irving Trust presented thornier problems, and the master trust/global custody areas were not spared.

Bank of New York's master trust assets for tax-exempt clients dropped almost 36%, to $56.1 billion this year from $87.5 billion last year; master custody assets increased to $66.5 billion from $58.8 billion.

Because of the merger, Bank of New York's master trust/master custody operation "lost momentum . . . from the perspective of the buying public," said Thomas Abraham, a partner with Andersen Consulting, New York. He cited two key problems — loss of some staff to major competitors and a perception that the sales effort "went into a state of limbo," causing a loss of visibility as officials focused on working out the merger.

Pensions & Investments' survey of customer satisfaction with master trust services showed Bank of New York received average to below-average marks (*see related story at left*). Still, pension fund clients interviewed for this story were more laudatory.

"We are very happy with Bank of New York," said William Parmentier, assistant treasurer and investment manager at Grumman Corp., Bethpage, N.Y. The bank is master trustee for Grumman's $2.2 billion in pension assets, and handles accounting and record keeping. As a customer of Bank of New York's prior to the merger, Mr. Parmentier said, he had been

See **Mergers** *on page 45*

U.S. facing a challenge

Recommended changes update trade settlement process

By Dennis M. Earle

In 1988, the Group of Thirty initiated a project to improve the state of risk, efficiency and cost in the world's clearance and settlement systems.

Given the impact of the October 1987 market break on post-trade areas of the financial industry, the group focused on those practices that increased the risks involved with "money meeting securities" in settling trades.

The group, an independent, non-partisan, non-profit organization, published a list of nine recommendations, and committees in each country have been set up to oversee the adoption of these recommendations.

The U.S. market system basically is in compliance with the majority of these recommendations. Two of the recommendations, however, (that trades settle on trade day plus three, and that settlement be made in same-day funds) have been examined by the U.S. Working Committee. That panel was established to study the impact that adopting these two recommendations would have on the U.S. systems.

Inherent in the Group of Thirty's recommendations is a powerful competitive challenge. Settling trades earlier than T plus five will result in fewer trades "in the pipeline," thereby reducing overall risk to the system. Today, markets like Japan's already settle trades in less than three days.

As more countries move toward compliance with the G30 recommendation, the United States will be faced with the possibility of not being on the leading edge of safety and efficiency in its settlement of trades unless it, too, moves toward earlier settlement.

The U.S. Working Committee is recommending all corporate equity and debt trades, as well as municipal securities trades, be settled on T plus three in 1992. Available data indicate, for street-side trades, this poses little, if any, change. The use of depositories is sufficiently widespread that the vast majority of securities are in hand on T plus three for trades among intermediaries, as well as for those between intermediaries and institutions.

In support of these changes as they affect institutional clients, the committee envisions the Depository Trust Co.'s ID System would change from its curr batch mode to an interactive o

On the retail side, data on "s transactions also seem to indic most securities are in hand b plus three. On the "buy" side retail customers, the majority monies are in house as good fu by T plus three; but, to collect residual, which now arrives check on T plus four or later, require some behavior modifi tion. This offers the industry opportunity to rethink how we teract with retail customers to look at T plus three settlem not just as a shortening of the s tlement period by two days, also as a new process.

The committee further rec mends trades be settled only book entry between financial termediaries, and between int mediaries and institutional c tomers, by 1992. The signific amount of immobilization that ready exists indicates this is r dily achievable.

For retail customers, the co mittee is extremely sensitive the unique retail participation U.S. markets, as well as the r tradition surrounding the p session of physical certificat The committee believes that today's competitive world, t cost savings associated w book-entry-only settlement m be realized. The committee the fore recommends book-entry s tlement for retail customers achieved in 1995 using a dir registration-type alternative the use of physical certificates.

With significant advantages the industry in terms of cost, issuers in terms of knowing th customers and to the retail inv tors in terms of perceived se rity, implementation of a dir registration-type system may celerate the trend by retail c tomers to leave their securit with third parties.

The committee does not beli the current retail trend towa leaving securities with a financ intermediary will result in t elimination of the use of physi certificates in the foreseeable ture, unless an alternative (su as direct registration) is offered

The committee also reco mends settlement between fina cial intermediaries, and betwe financial intermediaries and stitutional customers, be acco plished using same-day funds 1992. Same-day funds are th that have finality of payment the same day the notice of tra fer is sent to the recipient. An ample in the United States is Fe wire, which is operated by t Federal Reserve System.

Of greater concern to the co mittee is how retail payme would be made. Given the curre state of retail payment syste both in terms of availability well as user friendliness, the co mittee is unable to recomme that retail payments be effected same-day funds. Available da indicate a growing retail custom preference to leave funds on d posit at intermediaries.

The committee believes th having intermediaries and ins tutional customers settle in sam day funds while retail custome pay in next-day, or later, funds achievable and will reduce over financial system risk.

The committee has continued involve a growing number of ma ket participants in its evaluati of the T-plus-three settlement a same-day funds recommend tions. In addition, a questionna is available to any firm wishing participate to this evaluation pr cess. The committee expects present its final recommendatio to the Securities and Exchan Commission in late November.

Mr. Earle is executive director of the U.S. Working Committee of the Group of Thirty Clearance and Settlement Project.

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900 Euclid Ave., Cleveland, Ohio 44101-0937; (216) 737-4069

Domestic master trust assets	$4,788,000,000
Tax-exempt	$4,788,000,000
Domestic master custodial	$9,045,000,000
Tax-exempt	$9,045,000,000
Domestic master trust clients	64
Domestic master custodial clients	22
Account supervisors	7
Reports available on-line:	
Monthly transaction	
Asset & liability	

Ameritrust Co. N.A. reported new, tax-exempt domestic master trust business of $237 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $3.9 billion.

In addition to account administration in Ohio, Ameritrust offers administration and service in Texas and Indiana; all operations and reporting originates in Cleveland.

The primary accounting method is settlement date accounting. Trade-date reporting is offered.

Services offered in the basic master trust/master custodial agreement are securities lending, performance measurement, benefit payments, cash management, global custody and performance analytics.

Customized reports and an on-line inquiry system are available for additional fees.

Record-keeping services include 401(k), profit-sharing, ESOPs and thrift savings plans.

New features include global securities lending.

Fees are based on market value at quarter end and transactions for the quarter.

Gary W. Queen is client contact.

Bank of America

1 S. Van Ness, Second Floor, San Francisco, Calif. 94103; (415) 241-7567

Domestic master trust assets	$2,100,000,000
Tax-exempt	$2,100,000,000
Domestic master custodial	$83,000,000,000
Tax-exempt	$16,000,000,000
Taxable	$67,000,000,000
Domestic master trust clients	3
Domestic master custodial clients:	
Tax-exempt	350
Taxable	550
Account supervisors	40
Reports available on-line:	
Monthly transaction	

Bank of America reported new, tax-exempt domestic master custody assets of $150 million in the year ended June 30.

The primary accounting method is average cost, FIFO, LIFO and trade date, accrual and unitized accounting are offered.

Services offered in the basic trust/custodial agreement are custody of assets, settlement, capital change services, collection and crediting of income, automatic cash sweeps, benefit disbursements and investment in the bank's collective funds.

Investment management, participant record keeping and performance measurement are available for additional fees.

Record-keeping services offered include participant record keeping.

New features include electronic reporting capabilities and an electronic instruction system through which clients can transmit trade instructions directly from their PCs.

Fees for domestic services are based on a standard fee schedule, composed of both transactions and safekeeping charges. Account size, asset mix and the level of trading activity are considered in fee negotiations.

W.L. Metzger is the master trust client contact; Robert Darmanin is client contact for master trust.

Bank of Boston

Securities Division, P.O. Box 1882, MS-45-01-11, Boston, Mass. 02105; (617) 575-2151

Domestic master trust assets	$1,845,000,000
Tax-exempt	$1,845,000,000
Domestic master custodial	$2,600,000,000
Tax-exempt	$2,600,000,000
Domestic master trust clients	27
Domestic master custodial clients	9
Account supervisors	6
Reports available on-line:	
Monthly transaction	
Asset & liability	

Bank of Boston reported new, tax-exempt domestic master trust business of $102 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $1 million.

The primary accounting method is trade date. Settlement date and cash basis accounting, as well as six tax lot accounting methods for asset dispositions, are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping and settlement; income collection; corporate action processing; cash management and accounting and reporting.

Global custody, benefit disbursements, securities lending, on-line access, plan accounting and endowment donor accounting services are available for additional fees.

New features include the Boston Window, a single access point for all electronic delivery products and information services.

Fees are based on market value, transactions and portfolio charges.

Daniel T. Notartomaso is the client contact.

Bank IV

P.O. Box 4, 100 N. Broadway, Wichita, Kan. 67201-0004; (316) 261-4555

Domestic master trust assets	$659,000,000
Tax-exempt	$659,000,000
Domestic master custodial	$4,714,000,000
Tax-exempt	$233,000,000
Taxable	$4,481,000,000
Domestic master trust clients	124
Domestic master custodial clients:	
Tax-exempt	29
Taxable	24
Account supervisors	9
Reports available on-line:	
Monthly transaction	
Asset & liability	

Bank IV's primary accounting method is trade date with accruals. Trade date without accruals, settlement date with accruals, and settlement date without accruals are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping, cash sweeping, individually designed statements and trusteeship.

Performance analysis and on-line access are available for additional fees.

Record-keeping services offered include special custodial services for assets of insurers.

New features include an in-house liquidity fund for cash sweeping.

Fees are based on the number and type of securities, the number of transactions and the dollar value of assets.

Roger A. Ramseyer is the client contact.

Bank of New York

1 Wall St., New York, N.Y. 10286; (212) 495-1785

Domestic master trust assets	$78,251,000,000
Tax-exempt	$56,128,000,000
Taxable	$22,123,000,000
Domestic master custodial	$69,549,000,000
Tax-exempt	$66,477,000,000
Taxable	$3,072,000,000
Domestic master trust clients:	
Tax-exempt	184
Taxable	9
Domestic master custodial clients:	
Tax-exempt	74
Taxable	13
Account supervisors	46
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Bank of New York reported new, tax-exempt domestic master trust business of $722 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $2 billion.

The primary accounting methods are trade and settlement date. Average cost, tax lot basis, amortized cost and liability accounting are offered.

Services offered in the basic master trust/master custodial agreement are global safekeeping, full trust administration, STIF funds, zero balance sweeps, portfolio plan accounting, on-line services, ERISA reporting and client training.

Benefit payments, worldwide securities lending and trade settlement, multicurrency accounting, performance measurement and analytics, consulting services and specialized STIF funds are available for additional fees.

Record-keeping services offered include monthly, quarterly and annual portfolio accounting, on-line on-line transaction and position reports, and multicurrency performance reporting.

New features include enhanced investment manager modeling and strategic tracking, and local PC management workstations.

Fees are negotiated individually, based on market asset value, transactions, portfolio structure and services required.

John Ehrmann is the master trust client contact; William Barren is the master custody client contact.

Bank of Oklahoma N.A.

P.O. Box 2300, Tulsa, Okla. 74192; (918) 588-6437

Domestic master trust assets	$2,598,000,000
Tax-exempt	$1,938,000,000
Taxable	$660,000,000
Domestic master trust clients:	
Tax-exempt	97
Taxable	1
Account supervisors	7
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Bank of Oklahoma N.A. reported new, tax-exempt domestic master trust business of $10 million in the year ended June 30.

The primary accounting method is contractual settlement date, full accrual. Trade date and cash basis accounting are offered.

Services offered in the basic master trust/master custodial agreement are auto cash management, on-line access, current pricing, immediate credit of income, performance measurement, and regulatory, broker and accounting reports.

Investment management, distribution services, employee benefit record keeping, ADP & ACP testing and investment decision support services are available for additional fees.

Record-keeping services offered include 401(k), profit-sharing, money purchase, thrift, Keoghs, IRAs, defined benefit, plan administration, master plans, ESOPs and BESOPs.

New features include its investment decision support system.

Fees for domestic services are based on asset market value and/or transaction volume.

The client is Scott A. MacDonald.

Bankers Trust Co.

280 Park Ave., New York, N.Y. 10017; (212) 850-2089

Domestic master trust assets	$182,000,000,000
Tax-exempt	$181,000,000,000
Taxable	$1,000,000,000
Domestic master custodial	$74,400,000,000
Tax-exempt	$60,600,000,000
Taxable	$13,800,000,000
Domestic master trust clients:	
Tax-exempt	366
Taxable	3
Domestic master custodial clients:	
Tax-exempt	73
Taxable	27
Account supervisors	185
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Bankers Trust Co. reported new, tax-exempt domestic master trust business of $2.5 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $8.6 billion.

The primary accounting method is fully accrued contractual settlement date, maintaining both trade-date and contractual settlement date positions. Tax lot accounting and inventory recording on an average cost basis are offered.

Services offered in the basic master trust/master custodial agreement are cash management, safekeeping, accounting and reporting, transaction processing, investment manager liaison and regulatory updates.

Domestic and international securities lending, global custody, performance measurement and analytics, on-line access, customized graphics, benefit payments, investment management, actively managed STIF accounts, discount brokerage, consulting, dividend reinvestment, trade execution monitoring and participant record-keeping are available for additional fees.

Other record-keeping services offered include daily valuation and fund transfer service and plan sponsor access through terminals.

New features include Autotrade, an automated trade instruction processing system for sponsors and managers; same-day fund valuation; intramonth performance measurement; and combined global reporting.

Fees for domestic services are negotiated individually.

The master trust client contact is Jessica Wait; the master custody client contact is Robert Betz.

BayBanks

175 Federal St., Boston, Mass. 02110; (617) 482-1048

Domestic master trust assets	$228,000,000
Tax-exempt	$228,000,000
Domestic master custodial	$486,000,000
Tax-exempt	$486,000,000
Domestic master trust clients	53
Domestic master custodial clients	10
Account supervisors	2

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New York, NY 10104
(212) 408-2900

BayBanks reported new, tax-exempt domestic master trust business of $45 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $73 million.

The primary accounting method is accrual. Cash accounting also is offered.

Services offered in the basic master trust/master custodial agreement are custody, capital actions, income collection and trade settlement. Pension payment processing is available for an additional fee.

Record-keeping services offered include participant accounting, 401(k) and profit-sharing plans.

Fees are based on the market value of the assets.

The master trust client contact is Anthony Solomita; the master custody client contact is Eugene J. Durgin.

Boatmen's Trust Co.

100 N. Broadway, St. Louis, Mo. 63178-4737; (314) 466-3800

Domestic master trust assets	$2,177,000,000
Tax-exempt	$2,177,000,000
Domestic master custodial	$16,305,000,000
Tax-exempt	$16,305,000,000
Domestic master trust clients	13
Domestic master custodial clients	58
Account supervisors	22

Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

Boatmen's Trust Co. reported new, tax-exem domestic master trust business of $303 million the year ended June 30 and new, tax-exempt d mestic master custodial business of $1.291 billion.

The primary accounting method is fully accru trade date. Settlement date accounting is offered.

Services offered in the basic master trust/mast custodial agreement are administration, custod trade settlement, income collections, daily pricin tax lot accounting and automated cash sweeps.

Global custody, securities lending, on-line a counting, performance measurement, cash mai agement, pooled funds and standard portfolio benefit payments and participant record keepir are available for additional fees.

Record-keeping services offered include real e tate custody and equitable share accounting.

New features include on-line access to equity an fixed-income characteristics, on-line performanc measurement and enhanced STIF.

Fees are based on the number of investmer managers, the number and type of transactions an market value of assets.

Richard W. Hibbs is the client contact.

Boston Safe Deposit & Trust

1 Boston Place, Boston, Mass. 02108; (617) 722-7000

Domestic master trust assets	$54,632,000,00
Tax-exempt	$54,161,000,00
Taxable	$471,000,00
Domestic master custodial	$98,830,000,00
Tax-exempt	$98,117,000,00
Taxable	$713,000,0
Domestic master trust clients:	
Tax-exempt	5
Taxable	
Domestic master custodial clients:	
Tax-exempt	3
Taxable	
Account supervisors	4

Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

Boston Safe Deposit & Trust Co. reported new tax-exempt domestic master trust business of $1.2 billion in the year ended June 30 and new, tax-ex empt domestic master custodial business of $85 million.

The primary accounting methods are trade date full accrual and general ledger.

Services offered in the basic master trust/maste custodial agreement are cash management, ac counting/reporting and safekeeping.

Performance measurement and analysis, partici pant record keeping, benefit payments, securities lending, on-line information delivery and global cus tody are available for additional fees.

New features include the Client Reporting Sys tem, an information delivery management system and the Institutional Accounting System, a rea time accounting and reporting system with exten sive domestic and international trade capture an reporting capabilities.

Fees are based on any of four elements: portfoli charges; asset-based charges; transaction charges and ancillary services provided.

John L. Carty is the client contact.

Chase Manhattan Bank N.A.

1211 Sixth Ave., New York, N.Y. 10036; (212) 730-2716

Domestic master trust assets	$71,900,000,00
Tax-exempt	$71,900,000,00
Domestic master custodial	$339,500,000,00
Tax-exempt	$76,500,000,00
Taxable	$263,000,000,00
Domestic master trust clients	11
Domestic master custodial clients:	
Tax-exempt	4
Taxable	19
Account supervisors	3
Reports available on-line:	
Monthly transaction	
Asset & liability	

Chase Manhattan Bank N.A. reported new, tax exempt domestic master trust business of $1.57 billion in the year ended June 30 and new, tax-ex empt domestic master custodial business of $1.80 billion.

The primary accounting method is fully accrued trade date, contractual. Cash, settlement date amortized, tax lot and plan accounting are offered.

Services offered in the basic master trust/maste custodial agreement are global safekeeping, trans action processing, income collection, corporate ac tion and proxy notification, legal consulting, ac counting, hard copy and on-line reporting, raw dat download, investment adviser liaison, cash sweep to zero, cash management and client systems train ing.

Securities lending; benefit payments; global cus tody; active and passive investment management performance measurement, peer comparison, asse allocation, plan construction and analytics; consult ing; tax lot accounting/reporting; bond amortization accretion; and customized reporting are available for additional fees.

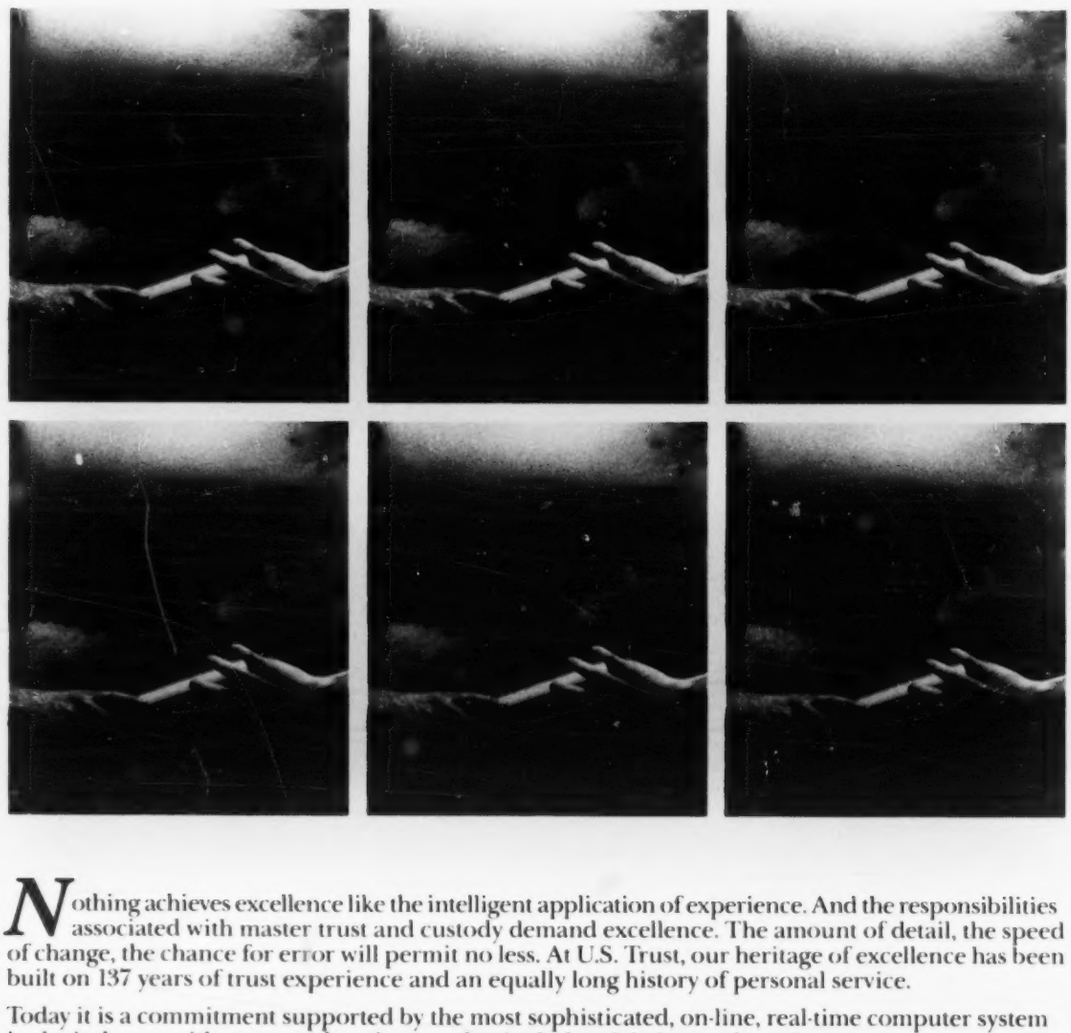
Record-keeping services offered include partici pant record keeping, benefit payments reporting and transfer agent.

New features include one-stop access to all on line functions; on-line consolidated holdings of U.S and international assets; deutsche mark-denomin ated securities lending; and a report writer, ena bling clients to format reports.

Fees are based on market value, transaction type and volume, and portfolio type and volume.

David Willour is the client contact.

We Are What We Repeatedly Do. Excellence Then Is Not An Act But A Habit. *Aristotle*



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Consultants directory: Nov. 12.

Chemical Bank

55 Water St., Third Floor, New York, N.Y. 10041; (212) 820-3308

Domestic master trust assets	$3,833,000,000
Tax-exempt	$3,833,000,000
Domestic master custodial	$35,926,000,000
Tax-exempt	$24,921,000,000
Taxable	$11,005,000,000
Domestic master trust clients	87
Domestic master custodial clients	
Tax-exempt	120
Taxable	19
Account supervisors	18
Reports available on-line	
Monthly transaction	
Asset & liability	
Performance measurement	

Chemical Bank reported new, tax-exempt domestic master trust business of $2 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $22,231 billion.

The figures include the master trust and custody assets of its subsidiary, Texas Commerce Bank.

The primary accounting method is full accrual trade date. Cash and settlement date accounting are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping, transaction processing, settlement, income collection, corporate action notification, proxy processing, accounting, reporting services, performance measurement, benefit disbursements (including on-line access), daily sweep of uninvested funds, account administration and investment adviser liaison.

Electronic access, domestic and international securities lending and global custody are available for additional fees.

New features include electronic access enhancements such as integrated information for domestic and global portfolios, daily valuation reporting, corporate action notification and cash forecasting.

Fees are based on a combination of the market value of the portfolios, the specific reporting requirements and relationship complexity.

Cinda Dooley is the client contact.

Citibank N.A.

1 Court Square, 12th Floor, Long Island City, N.Y. 11120; (718) 248-4347

Domestic master trust assets	$32,151,000,000
Tax-exempt	$32,118,000,000
Taxable	$33,000,000
Domestic master custodial	$82,939,000,000
Tax-exempt	$60,196,000,000
Taxable	$22,743,000,000
Domestic master trust clients	
Tax-exempt	195
Taxable	8
Domestic master custodial clients	
Tax-exempt	86
Taxable	24
Account supervisors	55
Reports available on-line	
Monthly transaction	
Asset & liability	
Performance measurement	

Citibank N.A. reported new, tax-exempt domestic master trust business of $330 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $55 million.

The primary accounting method is full accrual, true trade date. Settlement date and cash basis accounting also are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping and custody, cash management, trade date reporting, equitable share accounting and on-line information management.

Flexible reporting (Citicorp Portfolio Analyst), investment performance evaluation, TUCS comparison, global custody, securities lending, participant record keeping and DRIP service are available for additional fees.

Other record-keeping services offered include a voice response system.

New features include on-line pension disbursing.

Fees are based on individual services.

The master trust client contact is Pamela Bigler; the master custody client contact is Gerard Hourihan.

Citizens & Southern Trust

33 North Ave., Suite 550, Atlanta, Ga. 30308; (404) 897-3081

Domestic master trust assets	$20,600,000,000
Tax-exempt	$20,600,000,000
Domestic master custodial	$14,700,000,000
Tax-exempt	$14,700,000,000
Account supervisors	5
Reports available on-line	
Monthly transaction	
Asset & liability	
Performance measurement	

Citizens & Southern Trust Co. Inc.'s primary accounting method is trade date accrual. Settlement date, non-accrual is also offered.

Services offered in the basic master trust/master custodial agreement include financial accounting, transaction settlement and securities custody.

Portfolio evaluation, participant record keeping, ERISA disclosure, investment management and benefit disbursement are available for additional fees.

New features include a new reporting system.

Fees for domestic services are based on a percentage of assets plus transaction fees.

J. Dan Davis is the client contact.

Comerica Inc.

211 W. Fort St., Detroit, Mich. 48275-1035; (313) 222-5056

Domestic master custodial	$1,375,000,000
Tax-exempt	$1,375,000,000
Domestic master custodial clients	3
Account supervisors	2
Reports available on-line	
Monthly transaction	
Asset & liability	
Performance measurement	

Comerica Inc.'s primary accounting method is contractual settlement date.

Services offered in the basic master trust/master custodial agreement are customized reporting capability, on-site terminals and on-line services.

Performance measurement and securities lending are available for additional fees.

The bank also offers defined contribution and participant record keeping.

New features include performance measurement.

Fees are based on assets held and the number of transactions.

Robert J. Kay is the client contact.

Connecticut Bank & Trust

1 Constitution Plaza, Hartford, Conn. 06115; (203) 244-4876

Domestic master trust assets	$1,600,000,000
Tax-exempt	$1,600,000,000
Domestic master custodial	$561,000,000
Tax-exempt	$561,000,000
Domestic master trust clients	27
Domestic master custodial clients	14
Account supervisors	12

Connecticut Bank & Trust Co. reported new, tax-exempt domestic master trust business of $10 million in the year ended June 30.

The primary accounting method is settlement date accounting with accrual for income and adjustments for pending trades.

Services offered in the basic master trust/master custodial agreement are custody and a full reporting package, including master accountings; monthly, quarterly and annual accounting; investment reviews; and transaction statements.

Participant record keeping, disbursement, investment and performance measurement are available for additional fees.

Other record-keeping services offered include participant statements and reporting, valuations, discrimination testing, loan processing and employee communications.

Fees are based on assets, activity and services required.

Thomas Fenton is the client contact.

Continental Bank

231 S. LaSalle St., Chicago, Ill. 60697; (312) 828-3560

Domestic master trust assets	$14,176,000,000
Tax-exempt	$14,176,000,000
Domestic master custodial	$74,028,000,000
Tax-exempt	$5,662,000,000
Taxable	$68,366,000,000
Domestic master trust clients	141
Domestic master custodial clients	
Tax-exempt	20
Taxable	62
Account supervisors	18
Reports available on-line	
Monthly transaction	
Asset & liability	

Continental Bank reported new, tax-exempt domestic master trust business of $1.109 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $931 million.

The primary accounting method is fully accrued, trade date. Cash basis and settlement date accounting are offered.

Services offered in the basic master trust/master custodial agreement are trust accounting and reporting, plan accounting, clearance and custody of securities, income collection, automated cash management and on-line access to data.

Domestic and international securities lending; global custody; comparative performance measurement reporting and associated consulting; broker commission and trade execution reporting; benefit payments; self-insurance trust administration; investment management; GIC fund; cash management; and lockbox are available for additional fees.

Other record-keeping services offered include customized reporting.

New features include direct client input for maintenance of the benefits payments data base.

Fees for domestic services are based on market value of assets, transactions and services required.

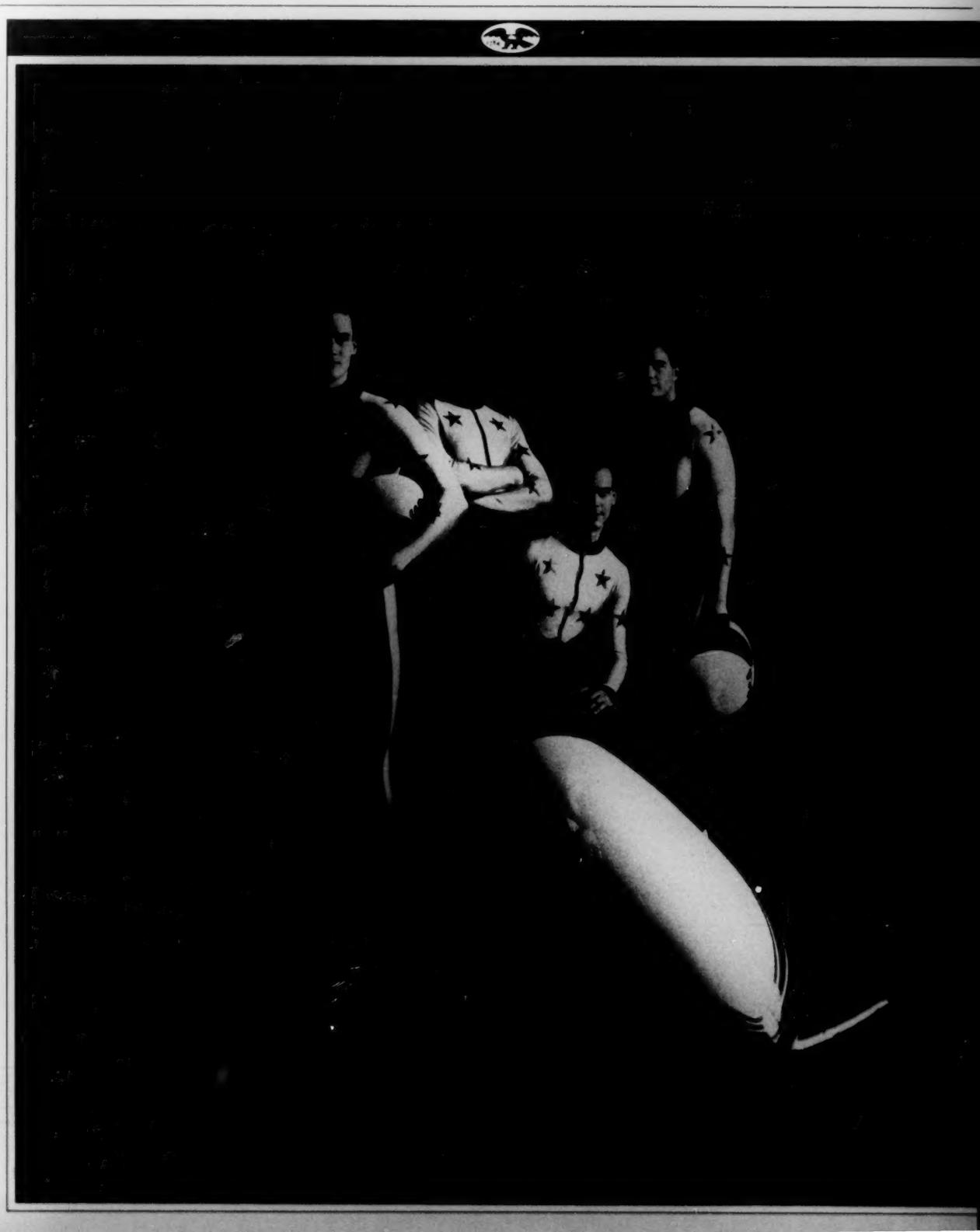
Christopher S. Ross is the client contact.

CoreStates Bank N.A.

P.O. Box 7558, Philadelphia, Pa. 19101-7558; (215) 786-7327

Domestic master trust assets	$4,638,000,000
Tax-exempt	$4,638,000,000
Domestic master custodial	$40,266,000,000
Tax-exempt	$37,098,000,000
Taxable	$3,168,000,000
Domestic master trust clients	26
Domestic master custodial clients	
Tax-exempt	20
Taxable	10
Account supervisors	20
Reports available on-line	
Monthly transaction	
Asset & liability	
Performance measurement	

CoreStates Bank N.A. reported new, tax-exempt domestic master trust business of $264 million in the year ended June 30.



CoreStates resulted from the Sept. 30 merger of First Pennsylvania Bank and Philadelphia National Bank. The assets in the profile represent the total assets the banks had as of June 30.

The primary accounting method is settlement date. Accrual trade-date adjusted accounting is also offered.

Services offered in the basic master trust/master ustodial agreement are asset administration, cash is accounting and accrual accounting.

Performance measurement, performance com-rison (TUCS), client terminals, securities lending, dex fund management, global custody and equity d fixed-income investment management are ailable for additional fees.

Record-keeping services offered include partici-nt record keeping, pension payroll and proxy vot-g.

New features include Schedule D reporting for surance companies.

Fees are transaction-based and asset-based.

Allen R. Bradley is the client contact.

Crestar Financial Corp.

919 E. Main St., Richmond, Va. 23261; (804) 782-5000

omestic master trust assets	$93,000,000
Tax-exempt	$93,000,000
omestic master custodial	$71,000,000
Tax-exempt	$71,000,000
Domestic master trust clients	6
Domestic master custodial clients	1
Account supervisors	3

Crestar Financial Corp.'s primary accounting method is full accrual.

Services offered in the basic master trust/master custodial agreement are custody, trade settlement, income collection, financial statements and cash sweep.

Investment management, participant accounting, pension payroll, benefit disbursement and tax reporting are available for additional fees.

Fees are based on asset value and individual services provided.

Wayne G. Larochelle is the client contact.

First Interstate Bank

707 Wilshire Blvd., W10-S, Los Angeles, Calif. 90017; (213) 614-3210

Domestic master trust assets	$5,000,000,000
Tax-exempt	$5,000,000,000
Domestic master custodial	$7,525,000,000
Tax-exempt	$7,000,000,000
Taxable	$525,000,000
Domestic master trust clients	27
Domestic master custodial clients:	
Tax-exempt	16
Taxable	7
Account supervisors	15
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

First Interstate Bank reported new, tax-exempt domestic master trust business of $600 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $14 million.

The primary accounting method is contractual settlement date. Trade date, tax lot and unitized accounting a.e also offered.

Services offered in the basic master trust/master custodial agreement are settlement, income collection, investment of idle cash and safekeeping.

On-line, real-time access, customized reporting, performance measurement and securities lending are available for additional fees.

New features include daily stock record for security domiciles; ReportMaster, an enhanced, customized reporting system; and trade order entry system.

Fees are based on market value plus transaction fees.

Deborah Dilley is the client contact.

First Interstate Bank of Washington N.A.

P.O. Box 21927, Seattle, Wash. 98111; (206) 292-3522

Domestic master trust assets	$120,000,000
Tax-exempt	$120,000,000
Domestic master trust clients	1
Account supervisors	1

First Interstate Bank of Washington N.A. offers unit accounting asset roll-up reporting in the basic master trust/master custodial agreement.

Fees are asset based.

Lawrence T. Divers is the client contact.

First National Bank of Chicago

1 First National Plaza, Chicago, Ill. 60670; (312) 732-1821

Domestic master trust assets	$754,000,000
Tax-exempt	$739,000,000
Taxable	$15,000,000
Domestic master custodial	$3,938,000,000
Tax-exempt	$956,000,000
Taxable	$2,982,000,000
Domestic master trust clients:	
Tax-exempt	12
Taxable	1
Domestic master custodial clients:	
Tax-exempt	6
Taxable	4
Account supervisors	4
Reports available on-line:	
Monthly transaction	

First National Bank of Chicago reported new, tax-exempt domestic master trust business of $45 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $342 million.

The primary accounting method is cash and settlement date.

Services offered in the basic master trust/master custodial agreement are custody and securities processing, automated cash management, accounting reports, benefit disbursements and performance measurement.

On-line inquiry, plan allocation reports and magnetic media output are available for additional fees.

New features include real-time securities processing, with customer access and input.

Fees are based on a combination of market value, activity and services provided.

The master trust client contact is Thomas J. Galligan; the master custody client contact is James V. Cusack.

First Trust National Association

180 E. Fifth St., St. Paul, Minn. 55101; (612) 223-7000

Domestic master trust assets	$5,128,000,000
Tax-exempt	$5,128,000,000
Domestic master custodial	$1,802,000,000
Tax-exempt	$599,000,000
Taxable	$1,203,000,000
Domestic master trust clients	27
Domestic master custodial clients:	
Tax-exempt	8
Taxable	5
Account supervisors	5
Reports available on-line:	
Monthly transaction	
Asset & liability	

First Trust National Association reported new, tax-exempt domestic master trust business of $265 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $277 million.

The primary accounting method is trade date with full accrual. Settlement date is also offered.

Services offered in the basic master trust/master custodial agreement are custodial services, trade date reporting, investment performance reporting, portfolio review, ERISA disclosure assistance, benefit disbursement and daily cash sweep.

Participant record keeping, individual investment management, GIC fund, global custody, dial-up and securities lending are available for additional fees.

New features include expanded dial-in capabilities.

Fees are calculated using a basis point charge plus transaction charges.

Dave Bodine is the client contact.

First Wachovia Corp.

301 N. Main St., Winston-Salem, N.C. 27150; (919) 770-6348

Domestic master trust assets	$30,432,000,000
Tax-exempt	$30,432,000,000
Domestic master custodial	$11,417,000,000
Tax-exempt	$7,667,000,000
Taxable	$3,750,000,000
Domestic master trust clients	87
Domestic master custodial clients:	
Tax-exempt	37
Taxable	25
Account supervisors	31
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

First Wachovia Corp. reported new, tax-exempt domestic master trust business of $653 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $101 million.

The primary accounting method is full accrual trade-date adjusted. Settlement date accounting is also offered.

Services offered in the basic master trust/master custodial agreement are custody, benefit payments, ERISA reporting, cash management, fail float analysis, monthly reporting, plan accounting, on-line inquiry, legal administrative guidance, administration and daily pricing.

Securities lending, global custody, asset allocation, options and futures processing, participant record keeping, performance measurement, portfolio analysis and comparative performance, customized reporting, trade execution reporting, equity index fund, GIC fund, cash management, proxy voting and monitoring, flexible reporting, timberland fund, charitable unitized accounting, private foundation, and tax preparation and deferred gift administration are available for additional fees.

Record-keeping services offered include participant record keeping for defined contribution plans and fund accounting.

New features include telephone access to participant account balances and a commingled Treasury fund.

Fees are based on market value and transaction charges.

The master trust client contact is Jane B. Fisher; the master custody client contact is David Taylor.

First Wisconsin Trust Co.

777 E. Wisconsin Ave., Milwaukee, Wis. 53202; (414) 765-4444

Domestic master trust assets	$2,106,000,000
Tax-exempt	$2,106,000,000
Domestic master custodial	$1,929,000,000
Domestic master trust clients	29
Domestic master custodial clients	4
Account supervisors	6
Reports available on-line:	
Monthly transaction	
Asset & liability	

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First Wisconsin Trust Co. reported new, tax-exempt domestic master trust business of $193 million in the year ended June 30.

The primary accounting method is fully accrued, trade date adjusted.

Services offered in the basic master trust/master custodial agreement are plan accounting (both dollar and unitized), care and custody of assets, transaction processing, cash management, consolidated and individual investment reviews and securities lending.

On-line access, relative and absolute performance measurement, benefit payments and participant record keeping are available for additional fees.

New features include enhanced relative performance measurement services.

Fees are based on market value of assets and numbers and types of transactions.

Robert J. Aubrecht is the client contact.

Harris Trust & Savings Bank

111 W. Monroe St., Chicago, Ill. 60603; (312) 461-2121

Domestic master trust assets	$49,248,000,000
Tax-exempt	$49,248,000,000
Domestic master custodial	$27,778,000,000
Tax-exempt	$2,778,000,000
Taxable	$25,000,000,000
Domestic master trust clients	77
Domestic master custodial clients:	
Tax-exempt	8
Taxable	100
Account supervisors	10
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Harris Trust & Savings Bank reported new, tax-exempt domestic master trust business of $803 million in the year ended June 30.

The primary accounting method is accrual trade date. Cash settlement date accounting also is offered.

Services offered in the basic master trust/master custodial agreement are custody, safekeeping, securities clearance, income collection, cash management, accounting and reporting.

Global custody, benefit disbursements, securities lending (domestic and foreign), performance measurement, universe comparison, portfolio analysis and consulting, participant record keeping, on-line access with data download and graphics, custom cash management, custom reporting and systematic investment management are available for additional fees.

Other record-keeping services offered include custom performance benchmarks.

New features include enhanced reporting, both hard copy and on-line.

Fees are based on market value, transactions and individual services.

The master trust client contact is George H. Walper Jr.; the master custody client contact is Walter J. Kowalczyk.

Hibernia National Bank

P.O. Box 61540, New Orleans, La. 70161; (504) 586-5542

Domestic master trust assets	$287,000,000
Tax-exempt	$287,000,000
Domestic master custodial	$2,017,000,000
Tax-exempt	$1,048,000,000
Taxable	$969,000,000
Domestic master trust clients	13
Domestic master custodial clients:	
Tax-exempt	10
Taxable	1
Account supervisors	9
Reports available on-line:	
Monthly transaction	
Asset & liability	

Hibernia National Bank reported new, tax-exempt domestic master trust business of $5 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $844 million.

The primary accounting method is accrual.

Services offered in the basic master trust/master custodial agreement are tailored to meet individual client needs.

On-line access to account information, benefit payments, participant record keeping and government filings are available for additional fees.

New features include a benefit payment system.

Fees are based on the market value of assets.

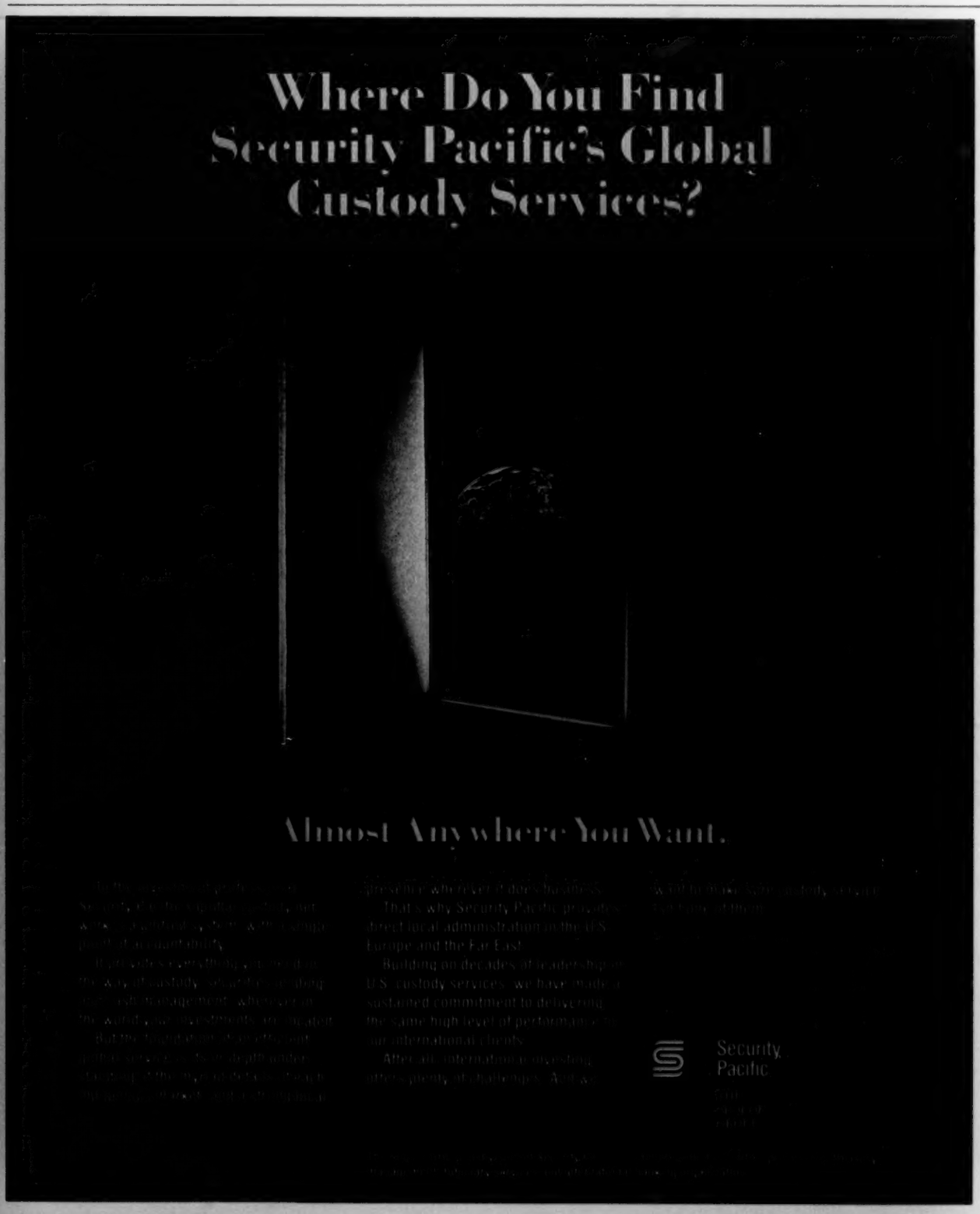
William J. Kearney III is the client contact.

International Trust Co.

Royal Bank Plaza, North Tower, P.O. Box 75, 14th Floor, Toronto, Ontario M5J 2J2; (416) 865-0515

Canadian master trust assets	$485,000,000
Tax-exempt	$468,000,000
Taxable	$17,000,000
Canadian master custodial	$1,642,000,000
Tax-exempt	$1,642,000,000
Canadian master trust clients:	
Tax-exempt	22
Taxable	2
Canadian master custodial clients	20
Reports available on-line:	
Monthly transaction	
Asset & liability	

International Trust Co. reported new, tax-exempt domestic master trust business of $48 million in the year ended June 30. The firm provides services to Canadian clients. All figures are in U.S. dollars.



The primary accounting method is full accru trust accounting.

Services offered in the basic master trust/mast custodial agreement are custody, settlement, r porting, legislative compliance and pension/lum sum payments.

Performance measurement, specialized reports and participant record keeping are available for a ditional fees.

New features include automated fee calculation electronic trade feed from Canadian Depository f securities, automatic sweep of cash balances an full multicurrency capabilities.

Fees are asset based, plus activity fees.

Sheldon D. Smaye is the client contact.

LaSalle National Trust N.A.

135 S. LaSalle St., Chicago, Ill. 60603 (312) 443-2300

Domestic master trust assets	$1,054,000,000
Tax-exempt	$1,054,000,000
Domestic master custodial	$7,503,000,000
Tax-exempt	$7,503,000,000
Domestic master trust clients	2
Domestic master custodial clients	32
Account supervisors	11
Reports available on-line:	
Monthly transaction	
Asset & liability	

LaSalle National Trust N.A. reported new, tax-exempt domestic master trust business of $10 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $83 million.

The primary accounting method is cash. Accrual accounting is offered.

Services offered in the basic master trust/master custodial agreement are account statements, cash management, benefits disbursements and securities safekeeping.

Participant record keeping and loan payment are available for additional fees.

Fees are based on a base charge, plus a percentage of assets.

Robert D. Meiresonne is the client contact.

Manufacturers Hanover

270 Park Ave., New York, N.Y. 10017; (212) 270-2327

Domestic master trust assets	$28,000,000,000
Tax-exempt	$25,500,000,000
Taxable	$2,500,000,000
Domestic master custodial	$42,000,000,000
Tax-exempt	$2,200,000,000
Taxable	$39,800,000,000
Domestic master trust clients:	
Tax-exempt	110
Taxable	15
Domestic master custodial clients:	
Tax-exempt	12
Taxable	1,111
Account supervisors	24
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Manufacturers Hanover reported new, tax-exempt domestic master trust business of $900 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $1.5 billion.

The primary accounting method is trade date. Actual, contractual settlement date accounting also is offered.

Services offered in the basic master trust/master custodial agreement are full administrative services; legal administrative guidance; monthly reports at manager level/plan level and master trust level; zero balance cash management; fail float management; options and futures processing; and ERISA reporting.

Performance measurement, benefit disbursement and related tax reporting, plan accounting, securities lending, TUCS comparisons, asset allocation/asset liability planning, actuarial services, global custody, customized reporting and on-line accounting and reporting are available for additional fees.

Other record-keeping services offered include participant record keeping.

New features include an integrated global securities processing and multicurrency reporting system.

Fees for domestic services are based on a combination of asset value and individual services.

Diane S. Reyes is the client contact.

Manufacturers National Bank of Detroit

411 W. Lafayette, Detroit, Mich. 48226; (313) 222-5414

Domestic master trust assets	$18,884,000,000
Tax-exempt	$18,884,000,000
Domestic master custodial	$6,720,000,000
Tax-exempt	$4,565,000,000
Taxable	$2,155,000,000
Domestic master trust clients	20
Domestic master custodial clients:	
Tax-exempt	50
Taxable	4
Account supervisors	10
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Manufacturers National Bank of Detroit reported new, tax-exempt domestic master trust business of $2 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $127 million.

The primary accounting method is trade date, fully accrued. Settlement date accounting also is offered.

Services offered in the basic master trust/master custodial agreement are trusteeship, custody, settlement, income collection, corporate action processing, cash management, reporting and plan accounting.

Performance measurement, TUCS, performance consulting, participant record keeping, benefit payments, securities lending, global custody, stock and bond index funds, investment management, downloading and on-line reporting are available for additional fees.

Other record-keeping services offered include defined contribution participant record keeping, including participant loan processing and lump-sum distributions.

New features include multicurrency accounting, enhanced global custody capabilities and on-line portfolio performance and analytics.

Fees are based on asset value, transactions and holdings.

Larry Rankens is the client contact.

Marine Midland Bank N.A.

250 Park Ave., Third Floor, New York, N.Y. 10177; (212) 503-2724

Domestic master trust assets	$2,000,000,000
Tax-exempt	$2,000,000,000
Domestic master custodial	$1,600,000,000
Tax-exempt	$1,000,000,000
Taxable	$600,000,000
Domestic master trust clients	35
Domestic master custodial clients:	
Tax-exempt	6
Taxable	8
Account supervisors	10

Marine Midland Bank N.A. reported new, tax-exempt domestic master trust business of $225 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $170 million.

The primary accounting method is accrual trade date. Settlement date accounting also is offered.

A standard master trust/master custodial service agreement is offered.

Performance measurement, participant record keeping, securities lending and benefit disbursement are available for additional fees.

Fees are based on asset value and services provided.

Moira Patterson is the client contact.

Marshall & Ilsley Trust Co.

770 N. Water St., Milwaukee, Wis. 53202; (414) 287-7187

Domestic master trust assets	$1,700,000,000
Tax-exempt	$1,700,000,000
Domestic master custodial	$1,900,000,000
Tax-exempt	$1,900,000,000
Domestic master trust clients	48
Domestic master custodial clients	7
Account supervisors	9

Reports available on-line:
- Monthly transaction
- Asset & liability

Marshall & Ilsley Trust Co. reported new, tax-exempt domestic master trust business of $180 million in the year ended June 30.

The primary accounting method is accrual.

Services offered in the basic master trust/master custodial agreement are performance measurement, ERISA disclosure, benefit disbursement, investment management and participant record keeping.

On-line access and data downloading are available for additional fees.

Fees are based on asset value and individual services.

Morry L. Birnbaum is the client contact.

Mellon Bank

1 Mellon Bank Center, Suite 3325, Pittsburgh, Pa. 15258; (412) 234-1336

Domestic master trust assets	$124,349,000,000
Tax-exempt	$123,056,000,000
Taxable	$1,293,000,000
Domestic master custodial	$37,285,000,000
Tax-exempt	$17,163,000,000
Taxable	$20,122,000,000
Domestic master trust clients:	
Tax-exempt	147
Taxable	13
Domestic master custodial clients:	
Tax-exempt	40
Taxable	55

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

Mellon Bank reported new, tax-exempt domestic master trust business of $5.7 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $1.7 billion.

The primary accounting method is trade date fully accrued. Cash accounting also is offered.

Services offered in the basic master trust/master custodial agreement are conversion, administration, automated cash sweep, cash management, accounting and reporting.

Securities lending, global custody, participant record keeping, pension disbursement, performance measurement, options, futures and on-line services are available for additional fees.

New features include global securities lending.

Fees are based on an account base charge, asset value charge and transaction charge.

Timothy F. Keaney is the client contact.

Montreal Trust Co. of Canada

15 King St. W., Toronto, Ontario M5H 1B4; (416) 860-5948

Canadian master trust assets	$8,250,0
Tax-exempt assets	$8,250,0
Domestic master trust clients	
Account supervisors	

Reports available on-line:
- Monthly transaction
- Asset & liability

Montreal Trust Co. of Canada's primary a ing method is settlement date.

Services offered in the basic master trust custodial agreement are safekeeping, acc records, accounting statements and asset tions.

Transaction activity, additional participants zation, investment portfolio accounts partic on a segregated basis, mortgage administ audit letters, strip coupon custody, benef ments, dial-up systems, customized repor government reports are available for add fees.

Fees are based on average book value.

The client contact is Terry McLeod.

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under the management of
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Bank of Montreal

Harris Trust and Savings Bank • 111 West Monroe Street • Chicago, IL 60690 • (312) 461-2542

NBD Bank N.A.

611 Woodward Ave., Detroit, Mich 48226; (313) 225-2660

Domestic master trust assets	$12,904,00
Tax-exempt	$12,904,00
Domestic master custodial	$23,025,00
Tax-exempt	$22,241,00
Taxable	$784,00
Domestic master trust clients	
Domestic master custodial clients:	
Tax-exempt	
Taxable	
Account supervisors	

Reports available on-line:
- Monthly transaction
- Asset & liability

NBD Bank N.A. reported new, tax-exempt mestic master trust business of $115 million year ended June 30 and new, tax-exempt dom master custodial business of $676 million.

The primary accounting methods are trade and settlement date recognition for securities pending trades and income accrual schedules.

Services offered in the basic master trust/m custodial agreement are custody, benefit disb ment, cash management, performance mea ment, portfolio review, domestic and global s ties lending, global custody, on-line downloa and on-line inquiry.

Participant record keeping and investment agement are available for additional fees.

Other record-keeping services offered in mutual fund accounting.

New features include on-line inquiry, global rity lending, performance measurement graph ports, enhanced benefit disbursement and custody services.

Fees for domestic services are based on value and transactional analysis.

Jon R. Mittler is the client contact.

The Northern Trust Co.

50 S. LaSalle St., Chicago, Ill. 6067 (312) 630-6000

Domestic master trust assets	$110,664,00
Tax-exempt	$110,664,00
Domestic master custodial	$128,306,00
Tax-exempt	$90,938,00
Taxable	$37,368,00
Domestic master trust clients	
Domestic master custodial clients:	
Tax-exempt	
Taxable	
Account supervisors	

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

The Northern Trust Co. reported new, tax-ex domestic master trust business of $5.349 bil the year ended June 30 and new, tax-exempt mestic master custodial business of $20.283 bi

The primary accounting method is settle date, fully accrued. Trade date accounting is offered.

Services offered in the basic master trust/m custodial agreement are custody, daily pricing, settlements, income collections and capital ture changes, and standard reporting.

Global custody, electronic delivery, perform analysis, securities lending, benefit payments, accounting, cash management and investment vices are available for additional fees.

New features include expanded internationa curities lending, enhanced global on-line info tion, and a public fund universe for perform analysis.

Fees for domestic services are based on number of investment managers, the number types of transactions and the market valu assets.

Thomas W. Kirnen is the client contact.

Norwest Bank Minnesota

South Street & Marquette Avenue, Minneapolis, Minn. 55479-0035, (612) 667-0694

Domestic master trust assets	$3,300,00
Tax-exempt	$3,300,00
Domestic master custodial	$1,200,00
Tax-exempt	$1,200,00
Domestic master trust clients	
Domestic master custodial clients	
Account supervisors	

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

Norwest Bank Minnesota reported new, ta empt domestic master trust business of $412 m in the year ended June 30 and new, tax-ex

domestic master custodial business of $100 million.

The primary accounting method is trade date full accrual. Settlement date accounting also is offered.

Services offered in the basic master trust/master custodial agreement are administration, custody, trade settlement, income collection, capital structure changes, daily pricing, tax lot accounting, investment reports and automated cash sweeps.

Securities lending, performance measurement, portfolio analytics, on-line access, custom investment management, participant record keeping and pension disbursement are available for additional fees.

New features include multiple pricing services, enhanced custom reports and on-line product enhancement.

Fees are based on the number of investment managers, the types and number of transactions and market value of the assets.

Jill Johnson is the client contact.

Royal Trust Corp. of Canada

P.O. Box 7500, Station "A", Toronto, Ontario M5W 1P9; (416) 981-7000

Canadian master trust assets	$25,520,000,000
Tax-exempt	$25,520,000,000
Domestic master trust clients	104

Royal Trust Corp. of Canada's primary accounting method is statement date. Adjustments are made on statements to reflect pending transactions are offered.

The basic master trust/master custodial agreement offers a full range of sponsor support services, including performance measurement and record keeping.

Other record-keeping services offered include full defined contribution record keeping.

Fees for domestic services are based on asset value and transactions.

Norma Young-Mayer is the client contact.

Security Pacific Bank

333 S. Grand, Suite 1740, Los Angeles, Calif. 90071; (213) 229-2999

Domestic master trust assets	$22,000,000,000
Tax-exempt	$20,000,000,000
Taxable	$2,000,000,000
Domestic master custodial	$227,000,000,000
Tax-exempt	$50,000,000,000
Taxable	$177,000,000,000
Domestic master trust clients:	
Tax-exempt	30
Taxable	10
Domestic master custodial clients:	
Tax-exempt	55
Taxable	320
Account supervisors	100

Security Pacific Bank reported new, tax-exempt domestic master trust business of $3 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $13 billion.

The primary accounting methods are trade date for trust accounts and cash for custody accounts. Settlement, accrual, LIFO, FIFO, average cost and amortization/accretion accounting also are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping, clearing, income collection, capital change notification, reporting, on-line access, ERISA reporting and report writer.

Investment management, performance measurement/analytics, securities lending, global custody, benefit payments and unitized accounting are available for additional fees.

New features include the report writer, on-line performance measurement, automated capital change and an enhanced on-line trade input/inquiry system.

The cost is based on a combination of asset-based fees and unbundled transaction fees.

Brad Marcus is the client contact.

Security Trust Co. N.A.

1501 Pennsylvania Ave. N.W., Washington, D.C. 20013; (202) 624-4158

Domestic master trust assets	$1,211,000,000
Tax-exempt	$969,000,000
Taxable	$242,000,000
Domestic master custodial	$6,008,000,000
Tax-exempt	$1,979,000,000
Taxable	$4,029,000,000
Domestic master trust clients:	
Tax-exempt	64
Taxable	15
Domestic master custodial clients:	
Tax-exempt	37
Taxable	20
Account supervisors	13
Reports available on-line:	
Monthly transaction	
Asset & liability	

Security Trust Co. N.A. reported new, tax-exempt domestic master trust business of $103 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $182 million.

The primary accounting method is settlement date. Trade date/accrual accounting also is offered.

Services offered in the basic master trust/master custodial agreement are record keeping, trusteeship, securities safekeeping and settlement, and investment management.

Consulting, prototype plans, unitized accounting, administrative procedure review and plan communications are available for additional fees.

Other record-keeping services offered include 5500 format and performance measurement.

New features include an open-end mutual fund family.

Fees are based on market value with transaction charges.

The master trust client contact is Lisa MacInnes; the master custody client contact is Kathy A. Jackson.

State Street Bank and Trust

P.O. Box 1992, Boston, Mass. 02105-1992; (617) 847-2511

Domestic master trust assets	$136,859,000,000
Tax-exempt	$135,208,000,000
Taxable	$1,651,000,000
Domestic master custodial	$162,050,000,000
Tax-exempt	$151,427,600,000
Taxable	$10,623,000,000
Domestic master trust clients:	
Tax-exempt	195
Taxable	1
Domestic master custodial clients:	
Tax-exempt	99
Taxable	4
Account supervisors	91
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

State Street Bank and Trust Co. reported new, tax-exempt domestic master trust business of $5.198 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $6.023 billion.

The primary accounting method is trade date, full accrual. Tax lot, LIFO and FIFO accounting also are offered.

Services offered in the basic master trust/master custodial agreement are trusteeship, safekeeping, cash management, trade settlement, income collection, corporate action monitoring, daily weekly monthly valuation, fiduciary control and on-line access.

Global custody, global asset allocation, domestic and international index funds, performance measurement and analytics, securities lending and dividend reinvestment are available for additional fees.

Other record-keeping services offered include participant record keeping, plan accounting, mutual fund accounting and insurance reporting.

New features include integrated delivery of domestic and international accounting, automated options, automated Fed book entry system, advanced wire transfer system, real estate and venture capital accounting and performance measurement products, and insurance and private mutual fund services.

Fees are based on individual client needs, asset value, and transaction and per-portfolio charges.

Frank Antin is the client contact.

Trust Co. Bank (SunTrust Banks Inc.)

P.O. Box 4655, Atlanta, Ga. 30302; (404) 588-8206

Domestic master trust assets	$1,518,000,000
Tax-exempt	$1,518,000,000
Domestic master custodial	$2,389,000,000
Tax-exempt	$1,545,000,000
Taxable	$844,000,000
Domestic master trust clients	14
Domestic master custodial clients:	
Tax-exempt	6
Taxable	5
Account supervisors	11
Reports available on-line:	
Monthly transaction	
Asset & liability	

Trust Co. Bank (SunTrust Banks Inc.) reported new, tax-exempt domestic master trust business of $20 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $486 million.

The primary accounting method is trade date/full accrual. Contractual settlement date and cash accounting also are offered.

Services offered in the basic master trust/master custodial agreement are directed trade settlement, safekeeping, income collection, cash management and financial reporting, including plan unitization.

Securities lending, global custody, performance measurement, on-line access/download, participant record keeping and benefit disbursement are available for additional fees.

New features include report downloading capabilities.

Fees are based on market value and transactional fees.

Roger M. Birkholz is the client contact.

United States Trust Co.

114 W. 47th St., New York, N.Y. 10036-1532; (212) 852-1000

Domestic master trust assets	$65,500,000,000
Tax-exempt	$15,500,000,000
Taxable	$50,000,000,000
Domestic master custodial	$78,700,000,000
Tax-exempt	$5,400,000,000
Taxable	$73,300,000,000
Domestic master trust clients:	
Tax-exempt	107
Taxable	25
Domestic master custodial clients:	
Tax-exempt	48
Taxable	109
Account supervisors	26
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

United States Trust Co. reported new, tax-exempt domestic master trust business of $498 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $658 million.

The primary accounting methods used are trade date, contractual settlement and actual settlement, all with full accruals. Average cost, tax lot, amortization, accretion and full liability accounting also are offered.

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Services offered in the basic master trust/master custodial agreement are full monthly and annual accounting, on-line period-to-date accounting, on-line cash projection, Form 5500, options and futures accounting, legal and regulatory reporting, cash management, STIF sweep, corporate actions, proxy notifications, income collections, trade settlement, plan allocation, dividend reinvestment and full investment manager services.

Performance measurement, securities lending, investment analytics and consulting, global custody, benefit payments, passive and structured management, record keeping, flexible short-term money management, customized reporting and graphics, trade execution monitoring, and CPU to CPU interface and workstation capabilities are available for additional fees.

Other record-keeping services offered include full participant record keeping for 401(k) and profit-sharing plans, full mutual fund record keeping, daily pricing and processing of contribution and redemptions also are offered.

New features include enhancements to the firm's on-line asset management system, including on-line cash projections, real-time cash and securities settlements, on-line principal and income security history, and the integration of its automated security movement and control system.

Fees are based on transaction volumes, market value and services provided.

Schuyler V. Grant is the client contact.

Wilmington Trust Co.

Rodney Square North, Wilmington, Del. 19890; (302) 651-1000

Domestic master trust assets . $19,094,000,000
Tax-exempt $19,094,000,000
Domestic master custodial $333,000,000
Tax-exempt $333,000,000
Domestic master trust clients 12
Domestic master custodial clients 5
Account supervisors 5
Reports available on-line:
Monthly transaction
Asset & liability

Wilmington Trust Co. reported new, tax-exempt domestic master trust business of $5.13 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $202 million.

The primary accounting method is trade date, fully accrued. Contractual settlement date and cash accounting also are offered.

Services offered in the basic master trust/master custodial agreement are custody, cash management, master trust reporting, options and futures processing and performance measurement.

Investment and analytic services, on-line access, securities lending, global custody, pension disbursement and participant record keeping are available for additional fees.

Fees are based on asset value and transaction charges.

Barbara A. Uberti is the client contact.

GLOBAL

Bank of America

555 California St., San Francisco, Calif. 94104; (415) 622-2015

Total global custody assets . . $10,500,000,000
U.S. tax-exempt $2,000,000,000
U.S. tax-exempt clients 10
Account supervisors 12
Reports available on-line:
Monthly transaction

Bank of America oversaw $10.5 billion in total global custody assets as of June 30.

Germany, Japan and the United Kingdom are serviced by the global custody network. Twenty-eight other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in all countries in the network.

Fees are based on a flat, fixed fee or on a per-product price, based on an agreed upon service plan.

Other record-keeping services include multicurrency accounting, monthly activity reports, and fund accounting for non-U.S. based funds with offshore investments.

The client contact is Robert Darmann.

Bank of New York

1 Wall St., New York, N.Y. 10286; (212) 495-1784

Total global custody assets . . $24,200,000,000
U.S. tax-exempt $3,500,000,000
U.S. tax-exempt clients 20
Account supervisors 22
Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

The Bank of New York oversaw $24.2 billion in total global custody assets as of June 30.

The United Kingdom is serviced by the global custody network. Twenty-eight other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in all countries in its network.

Fees are calculated individually, based on market asset value, transactions, portfolio structure and services required.

Other record-keeping services include a multicurrency reporting package, available monthly, quarterly and annually.

The client contacts are Curtis A. Vamaka and Janet Zaban.

Bankers Trust Co.

280 Park Ave., New York, N.Y. 10017; (212) 850-4652

Total global custody assets . . $15,329,000,000
U.S. tax-exempt $2,513,000,000
U.S. tax-exempt clients 62
Account supervisors 15

Bankers Trust oversaw $15.3 billion in total global custody assets as of June 30.

Countries serviced by the global custody network are Ireland, Switzerland and the United Kingdom. Twenty-nine other countries are serviced by a subcustodian. The firm assists with foreign tax withholding in all countries in the network.

Fees are calculated on the basis of transaction volume, asset size and distribution across markets.

Other record-keeping services include daily on-line activity reports, multicurrency services, and performance measurement.

The client contact is Mary Ann Schreiber.

Barclays Bank PLC

75 Wall St., New York, N.Y. 10265; (212) 412-3439

Total global custody assets . . $75,000,000,000
U.S. tax-exempt $500,000,000
U.S. tax-exempt clients 3
Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

Barclays Bank oversaw $75 billion in total global custody assets as of June 30.

Countries serviced by the global custody network are Australia, Canada, France, Germany, Hong Kong, Ireland, Italy, Japan, the Netherlands, New Zealand, Portugal, Singapore, Spain, Switzerland and the United Kingdom. Fifteen other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in all applicable countries, depending on tax treaties and the client's status.

Fees are calculated on the basis of the market value of the assets held, transaction activity and reporting requirements.

Other record-keeping services offered include full multicurrency reporting.

The client contact is Paul Corelli.

Boatmen's Trust Co.

100 N. Broadway, St. Louis, Mo. 63102; (314) 466-3800

Total global custody assets $311,000,000
U.S. tax-exempt $311,000,000
Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

Boatmen's Trust Co. oversaw $311 million in total global custody assets as of June 30.

The bank offers a "private label" product, for which Bankers Trust and Chase Manhattan are the primary suppliers of the subcustodial network. Thirty-one countries are serviced by that network.

The bank assists clients with foreign tax withholding in all countries where dual taxation treaties exist.

Fees are calculated as a combination of asset-based fees and transaction fees.

The client contact is Richard W. Hibbs.

Boston Safe Deposit & Trust

1 Boston Place, Boston, Mass. 02108; (617) 722-7000

Total global custody assets . . $21,204,000,000
U.S. tax-exempt $10,401,000,000
U.S. tax-exempt clients 51
Account supervisors 25
Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

Boston Safe Deposit & Trust Co. oversaw $21.2 billion in total global custody assets as of June 30.

The United Kingdom is serviced by the global custody network. Thirty-three other countries are served by subcustodians. The bank assists clients with foreign tax withholding in all countries within its network.

Fees are based on any of the following five elements: portfolio charges (i.e. number and type); asset-based charges, assessed on the market value of total assets held; transaction charges, based on all securities settlements; ancillary services, such as performance measurement and on-line access; and incremental costs.

Other record-keeping services include benefit disbursements, record keeping, performance measurement, analysis and on-line inquiry and reporting.

The client contact is John L. Carty.

Brown Brothers Harriman

40 Water St., Boston, Mass. 02109; (617) 742-1818

Total global custody assets . $113,580,000,000
U.S. tax-exempt $238,000,000
U.S. tax-exempt clients 5
Account supervisors 250
Reports available on-line:
Monthly transaction
Asset & liability

Brown Brothers Harriman & Co. oversaw $113.6 billion in total global custody assets as of June 30.

Luxembourg is serviced by the global custody network. Thirty-three other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in all countries within its network.

Fees are calculated on a percentage of assets, plus a flat transaction charge. Out-of-pocket expenses are passed through to the client.

Other record-keeping services include double-entry multicurrency accounting, including a full general ledger, and participant accounting.

The client contact is Kristen F. Giarrusso.

Chase Manhattan Bank N.A.

1211 Sixth Ave., New York, N.Y. 10036; (212) 730-2716

Total global custody assets . $114,000,000,000
U.S. tax-exempt $23,900,000,000
U.S. tax-exempt clients 41
Account supervisors 24
Reports available on-line:
Monthly transaction
Asset & liability

Chase Manhattan Bank N.A. oversaw $114 billion in total global custody assets as of June 30.

Countries serviced by the global custody network are Argentina, Australia, Brazil, Chile, Germany, Hong Kong, Italy, Japan, Singapore, Spain, Thailand, Turkey and the United Kingdom. Twenty other countries are served by a subcustodian.

The bank assists clients with foreign tax withholding in nine countries.

Fees are calculated by market value, transaction type and volume, and portfolio type and volume by country.

Other record-keeping services include multicurrency valuation, tax lot reporting, participant record-keeping, securities lending reporting, benefit payments reporting and transfer agent.

The client contact is David Willour.

Employee benefit trends will be highlighted Dec. 10.

Chemical Bank

55 Water St., New York, N.Y. 10041; (212) 820-5000

Total global custody assets . . $14,041,000,000
Account supervisors 6
Reports available on-line:
Monthly transaction
Asset & liability

Chemical Bank oversaw $14 billion in total global custody assets as of June 30.

Countries serviced by the global custody network are Belgium, Guernsey, Luxembourg and the United Kingdom. Twenty-six other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in all countries in the network.

Fees are calculated by volume and country activity.

Other record-keeping services include full accrual accounting and reporting, cash management services and on-line inquiry and input reporting.

The client contact is Clive Gande in London at 071-380-5143.

Citibank N.A.

111 Wall St., New York, N.Y. 10043; (212) 559-1000

Total global custody assets . . $78,000,000,000
U.S. tax-exempt $1,400,000,000
U.S. tax-exempt clients 9
Account supervisors 250
Reports available on-line:
Monthly transaction
Asset & liability

Citibank N.A. oversaw $78 billion in total global custody assets as of June 30.

Countries serviced by the global custody network are Argentina, Austria, Australia, Brazil, Canada, Chile, France, Germany, Greece, Hong Kong, India, Indonesia, Italy, Japan, Jordan, Korea, Luxembourg, Malaysia, Mexico, the Netherlands, New Zealand, Philippines, Portugal, Puerto Rico, Singapore, Spain, Switzerland, Taiwan, Thailand, Turkey, the United Kingdom, Uruguay and Venezuela. Twelve other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in countries where applicable.

Fees may be either transaction or market-value based; may be tiered by region or geographic location; and may include subcustodian fees. Fees may be offset by balances.

Other record-keeping services include income collection, multicurrency accounting and foreign exchange.

The client contact is Rebecca K. Crain.

Continental Bank

231 S. LaSalle St., Chicago, Ill. 60697; (312) 828-4038

Total global custody assets . . . $2,600,000,000
U.S. tax-exempt $400,000,000
U.S. tax-exempt clients 6
Account supervisors 3
Reports available on-line:
Monthly transaction
Asset & liability

Continental Bank oversaw $2.6 billion in total global custody assets as of June 30.

The global custody network is composed of twenty-four countries, all serviced by subcustodians. The bank assists clients with foreign tax withholding in all countries where dual tax treaties exist.

Fees are unbundled, based on market value and transactions, and vary according to costs of investing in various foreign markets.

Other record-keeping services include international securities lending, foreign exchange and risk management.

The client contact is Cheryl A. Derezinski.

CoreStates Bank N.A.

P.O. Box 7558, Philadelphia, Pa. 19101-7558; (215) 786-7327

Total global custody assets $700,000,000
U.S. tax-exempt $700,000,000
U.S. tax-exempt clients 7
Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

CoreStates Bank N.A. oversaw $700 million in total global custody assets as of June 30.

The bank offers a "private label" product, for which State Street Bank & Trust Co. is the primary supplier of the subcustodial network. Twenty-six countries are served by the network. The bank assists clients with foreign tax withholding in all applicable countries.

The client contact is Allen R. Bradley.

First Interstate Bank-California

707 Wilshire Blvd., W10-S, Los Angeles, Calif. 90017; (213) 614-3210

Total global custody assets $240,000,000
U.S. tax-exempt $240,000,000
Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

First Interstate Bank-California oversaw $240 million in total global custody assets as of June 30.

The bank offers a "private label" product, for which Chase Manhattan is the primary supplier of the subcustodial network. Thirty-three countries are serviced by the network. The bank assists clients with foreign tax withholding in all countries in the network.

Fees are based on transaction type and number as well as market value.

The client contact is Deborah Dilley.

Public funds will be the subject of a special report Oct. 29.

Master trust/custody banks ranked by U.S. taxable assets*

Firm	Total	Master trust	Master custody
Chase Manhattan	263,000	—	263,000
Security Pacific	179,000	2,000	177,000
United States Trust	123,300	50,000	73,300
Continental Bank	68,366	—	68,366
Bank of America	67,000	—	67,000
Manufacturers Hanover	42,300	2,500	39,800
Northern Trust	37,368	—	37,368
Bank of New York	25,195	22,123	3,072
Harris Trust	25,000	—	25,000
Citibank	22,776	33	22,743
Mellon Bank	21,415	1,293	20,122
Bankers Trust	14,800	1,000	13,800
State Street	12,274	1,651	10,623
Chemical Bank	11,005	—	11,005
Bank IV	4,481	—	4,481
Security Trust	4,271	242	4,029
First Wachovia	3,750	—	3,750
CoreStates Bank	3,168	—	3,168
First Nat'l/Chicago	2,997	15	2,982
Manufacturers Nat'l/Detroit	2,155	—	2,155
First Trust	1,203	—	1,203
Boston Safe Deposit	1,184	471	713
Hibernia Trust	969	—	969
Trust Co. Bank	844	—	844
NBD	784	—	784
Bank of Oklahoma	660	660	—
Marine Midland	600	—	600
First Interstate/California	525	—	525
Total	**940,390**	**81,988**	**858,402**

* includes mutual funds and corporate accounts

Master trust/master custody banks ranked by new business* U.S. $ mils.

Firm	Total new business	New master trust	Clients	New master custody	Clients
Northern Trust	25,632	5,349	5	20,283	29
Chemical Bank	22,233	2	1	22,231	3
Security Pacific	16,000	3,000	12	13,000	30
State Street	11,221	5,198	21	6,023	23
Bankers Trust	11,100	2,500	15	8,600	14
Mellon Bank	7,400	5,700	20	1,700	9
Wilmington Trust	5,332	5,130	3	202	2
Ameritrust	4,137	237	3	3,900	6
Chase Manhattan	3,385	1,576	6	1,809	3
Bank of New York	2,725	722	11	2,003	8
Mfg. Hanover	2,400	900	15	1,500	27
Boston Safe Deposit	2,050	1,200	5	850	3
Continental Bank	2,040	1,109	7	931	14
Boatmen's Trust	1,594	303	3	1,291	6
United States Trust	1,156	498	7	658	3
Hibernia Trust	849	5	3	844	3
Harris Trust	803	803	5	—	—
NBD	791	115	8	676	10
First Wachovia	754	653	11	101	3
First Interstate/Calif.	614	600	4	14	1
First Trust	542	265	2	277	3
Norwest Bank Minn.	512	412	4	100	5
Trust Co. Bank	506	20	4	486	4
Marine Midland	395	225	4	170	5
First Nat'l/Chicago	387	45	2	342	1
Citibank	385	330	11	55	4
Security Trust	285	103	1	182	4
CoreStates Bank	264	264	4	—	—
First Wisconsin	193	193	5	—	—
Marshall & Ilsley	180	180	2	—	—
Bank of America	150	—	—	150	25
Mfg. Nat'l/Detroit	129	2	1	127	2
BayBanks	118	45	5	73	2
Bank of Boston	103	102	1	1	2
LaSalle Nat'l Trust	93	10	4	83	35
Bank of Oklahoma	10	10	7	—	—
Connecticut Bank	10	10	1	—	—
Total	**126,478**	**37,816**	**223**	**88,662**	**289**

The First National Bank of Boston
100 Federal St., Boston, Mass. 02110; (617) 575-2152

Total global custody assets ... $3,600,000,000
U.S. tax-exempt ... $200,000,000
U.S. tax-exempt clients ... 3
Account supervisors ... 3
Reports available on-line:
Asset & liability

First National Bank of Boston oversaw $3.6 billion in total global custody assets as of June 30.
Twenty-nine countries are serviced by subcustodians in the global custody network. The bank assists clients with foreign tax withholding in eight countries.
Fees are calculated on the basis of market valuations and transactions (either fee per transaction or fee based on settlement consideration).
Other record-keeping services include full service accounting.
The client contact is John Bushby.

First National Bank of Chicago
1 First National Plaza, Chicago, Ill. 60670; (312) 732-8130

Total global custody assets ... $7,271,000,000
U.S. tax-exempt ... $1,257,000,000
U.S. tax-exempt clients ... 3
Account supervisors ... 5
Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

First National Bank of Chicago oversaw $7.271 billion in total global custody assets as of June 30.
There are 22 countries serviced by subcustodians in the global custody network. The bank assists clients with foreign tax withholding in all applicable countries.
Fees are based on asset value, transaction volumes and reporting requirements.
Other record-keeping services include income due/upcoming reports and daily activity reports.
The client contact is Dale R. Sorenson.

First Trust National Association
180 E. Fifth St., St. Paul, Minn. 55101; (612) 223-7000

Total global custody assets ... $800,000,000
U.S. tax-exempt ... $75,000,000
U.S. tax-exempt clients ... 27
Account supervisors ... 5
Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

First Trust National Association oversaw $800 million in total global custody assets as of June 30.
Twenty-four countries are served by the global custody network through subcustodians.
The bank assists clients with foreign tax withholding in all countries.
Fees are calculated on a quarterly basis and consist of transaction charges, issue charges and an inventory basis point charge, plus reimbursement for foreign out-of-pocket expenses.
The client contact is Dave Bodine.

First Wachovia Corp.
301 N. Main St., Winston-Salem, N.C. 27150; (919) 770-6348

Total global custody assets ... $1,000,000,000
U.S. tax-exempt ... $1,000,000,000
Account supervisors ... 3
Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

First Wachovia Corp. oversaw $1 billion in total global custody assets as of June 30.
The bank offers a "private label" product, for which Chase Manhattan-London is the primary supplier of the subcustodial network. Thirty-one countries are serviced by the network.
Fees are asset and transaction based.
The client contact is Joyce Vanderlendin.

Harris Trust and Savings Bank
111 W. Monroe St., Chicago, Ill., 60603; (312) 461-2121

Total global custody assets ... $12,000,000,000
U.S. tax-exempt ... $940,000,000
U.S. tax-exempt clients ... 35
Account supervisors ... 8
Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

Harris Trust and Savings Bank oversaw $12 billion in total global custody assets as of June 30.
The global custody network is composed of 29 countries serviced by subcustodians. The bank assist clients with foreign tax withholding in all applicable countries.
A recent announcement of the formation of the Bank of Montreal Global Custody, to be managed by Harris Trust, will be fully implemented by yea end. At that time, all assets now under the control o subcustodians will be under Harris' control, as we as $8 billion now custodied at the Bank of Montrea in London.
Fees are based on a geographic band.
The client contact is Beth Stubenrauch.

Manufacturers Hanover
270 Park Ave., New York, N.Y. 10017; (212) 270-2327

Total global custody assets ... $70,000,000,00
U.S. tax-exempt ... $1,500,000,00
U.S. tax-exempt clients ... 2
Account supervisors ... 3
Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

Manufacturers Hanover oversaw $70 billion in total global custody assets as of June 30.
The United Kingdom is serviced by the globa custody network. Thirty other countries are served by subcustodians. Foreign tax withholding assis tance is offered in all countries in the global custody network.
Standard fees for core products are based on a fee for each security transaction and an ad-valorum charge on the value of the portfolio. Fees are typically structured in four bands, depending on the relative inefficiencies and costs of the various markets.
The client contact is Diane Reyes.

Manufacturers National Bank of Detroit
411 W. Lafayette, Detroit, Mich. 48226; (313) 222-5414

Total global custody assets ... $275,000,000
U.S. tax-exempt ... $275,000,000
Account supervisors ... 11
Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

Manufacturers National Bank of Detroit oversaw $275 million in total global custody assets as of June 30.
The bank offers a "private label" product, for which Morgan Stanley Trust Co. is the primary supplier of the subcustodial network. The primary accounting and reporting functions are conducted internally by Manufacturers National.
Twenty-eight countries are serviced by the network. The bank assists clients with foreign tax withholding in all countries in the network.
Fees are calculated by asset value and transaction activity.
Other record-keeping services include defined contribution participant record keeping.
The client contact is Larry Rankens.

Mellon Bank
1 Mellon Bank Center, Suite 3325, Pittsburgh, Pa. 15258; (412) 234-1336

Total global custody assets ... $4,400,000,000
U.S. tax-exempt ... $4,400,000,000
Account supervisors ... 24
Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

Mellon Bank oversaw $4.4 billion in total global custody assets as of June 30.
The bank offers a "private label" product, for which Pictet & Cie is the primary supplier of the subcustodial network. Twenty-seven countries are serviced by the network. The bank assists clients with foreign tax withholding in all countries in the network.
Fees are calculated using an account base charge, asset value charge and transaction charge.
The client contact is Timothy F. Keaney.

Midland Securities Services
5 Laurence Pountney Hill, London EC4R 0EU, U.K.; 071-260-5081

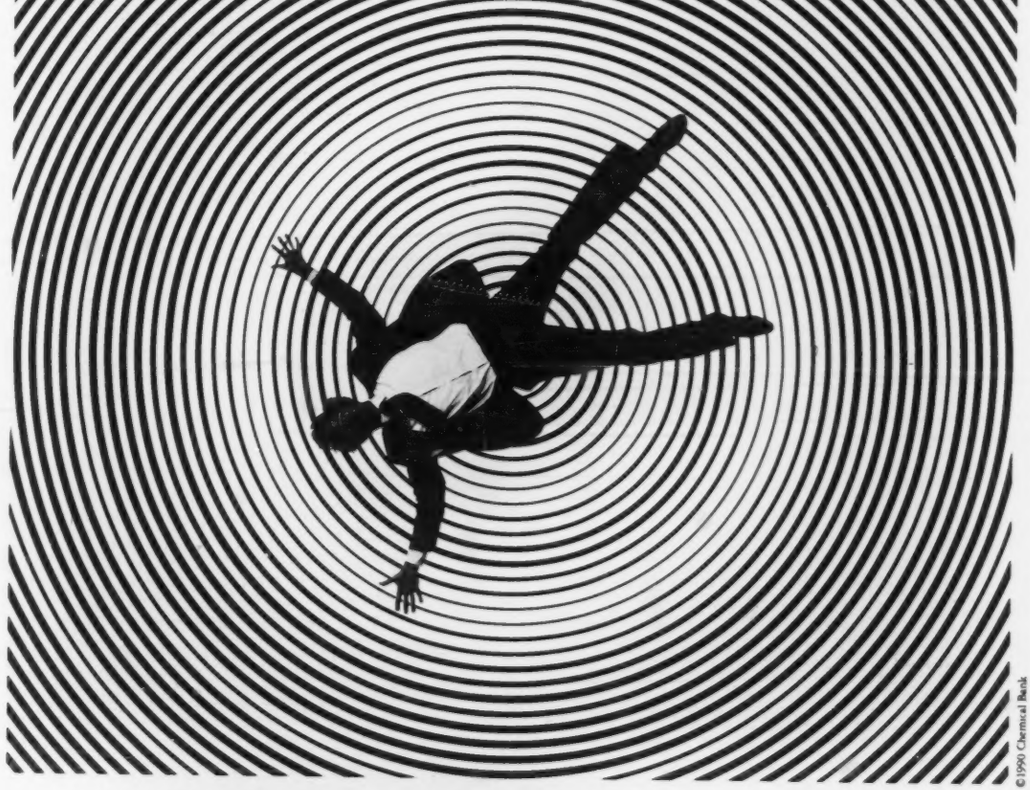
Total global custody assets ... $85,600,000,000

Midland Securities Services oversaw $85.6 billion in total global custody assets as of June 30. The firm provides U.K., European and other regional sub-custodian services to U.S. global custody providers.
The United Kingdom is serviced by the global custody network directly. An additional 48 countries are serviced by a subcustodian.
The bank assists clients with foreign tax withholding in 20 countries.
Fees are calculated as a basis point charge on total asset value or per line of stock. Transaction charges are levied as a flat fee per receipt or delivery of shares. Prices vary by location.
The client contact is Richard Hogsflesh.

Mitsubishi Global Custody
800 Wilshire Blvd., Los Angeles, Calif. 90017; (213) 621-1393

Total global custody assets ... $7,200,000,000
U.S. tax-exempt ... $5,098,000,000
U.S. tax-exempt clients ... 27
Account supervisors ... 5
Reports available on-line:
Monthly transaction
Asset & liability

Mitsubishi Global Custody oversaw $7.2 billion in total global custody assets as of June 30.



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CHEMICAL BANK
Financial Services Division

Japan is serviced by the global custody network. Twenty-one other countries are served by subcustodians. The bank assists clients with foreign tax withholding in 12 countries.

Fees are calculated based on market value plus a charge per transaction. Both vary by country.

Other record-keeping services include record keeping for securities lending.

The client contacts are Greg King and Dominick Alfano.

J.P. Morgan & Co.

60 Wall St., New York, N.Y. 10260; (212) 648-3250

Total global custody assets	$45,000,000,000
U.S. tax-exempt	$6,000,000,000
U.S. tax-exempt clients	22
Account supervisors	17

J.P. Morgan & Co. oversaw $45 billion in total global custody assets as of June 30.

Countries serviced by the global custody network are Argentina, Belgium, Brazil, France, Germany, Italy, Japan, Spain, Switzerland and the United Kingdom. Subcustodians served 21 additional countries. The bank assists clients with foreign tax withholding.

Fees are structured as a percentage of the market value based on the country of investment plus a transaction charge.

The client contact is Rene Vanguestaine.

Morgan Stanley Trust Co.

1 Evertrust Plaza, Jersey City, N.J. 07302; (201) 915-3900

Total global custody assets	$13,500,000,000
U.S. tax-exempt	$489,000,000
U.S. tax-exempt clients	5
Account supervisors	14
Reports available on-line:	
Monthly transaction	
Asset & liability	

Morgan Stanley Trust Co. oversaw $13.5 billion in total global custody assets as of June 30.

Japan is serviced by the global custody network. Twenty-seven other countries are served by subcustodians. The bank assists with foreign tax withholding in all countries in the network.

Fees are calculated on a two-tier fee schedule: safekeeping fees are billed as a percentage of assets and transactions are charged as a flat fee.

The client contact is John J. McManus.

NBD Bank N.A.

611 Woodward Ave., Detroit, Mich. 48226; (313) 225-2660

Total global custody assets	$500,000,000
U.S. tax-exempt	$500,000,000
Account supervisors	3

NBD Bank N.A. oversaw $500 million in total global custody assets as of June 30.

Countries serviced by the global custody network are Japan and the United Kingdom. Nineteen other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in all countries within its network.

Fees are calculated based on asset value and transaction by country, subject to a minimum charge.

The client contact is Jon R. Mittler.

NCNB National Bank

1 NCNB Plaza (T10-10), Charlotte, N.C. 28255; (704) 386-5115

Total global custody assets	$500,000,000
U.S. tax-exempt	$500,000,000
Account supervisors	3
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

NCNB National Bank oversaw $500 million in total global custody assets as of June 30.

The bank offers a "private label" product, for which Chase Manhattan Bank is the primary supplier of the subcustodial network. Thirty-two countries are serviced by the network. The bank assists clients with foreign tax withholding in all the countries in the network.

Fees are calculated on a base fee.

The client contact is K. Nick Kinney.

The Northern Trust Co.

50 S. LaSalle St., Chicago, Ill. 60675; (312) 444-5254

Total global custody assets	$21,000,000,000
U.S. tax-exempt	$12,680,000,000
U.S. tax-exempt clients	86
Account supervisors	65
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

The Northern Trust Co. oversaw $21 billion in total global custody assets as of June 30.

Thirty-two countries are serviced by subcustodians. Clients are assisted with foreign tax withholding in all countries in the network.

Fees are negotiated on a case-by-case basis.

Other record-keeping services include participant level reporting for commingled funds and tax reclamation reporting.

The client contact is Jennifer K. Cameron.

Norwest Bank Minnesota

Sixth Street and Marquette Avenue, Minneapolis, Minn. 55479-0035; (612) 667-0694

Total global custody assets	$400,000,0
U.S. tax-exempt	$400,000,0
Account supervisors	
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Norwest Bank Minnesota oversaw $400 million total global custody assets as of June 30.

The bank offers a "private label" product, which Morgan Stanley is the primary supplier of t subcustodial network. Twenty-one countries a served by the network. The bank assists clients w foreign tax withholding in all countries within t network.

Fees are based on account complexity and t number and type of transactions.

The client contact is Jill Johnson.

Security Pacific Bank

333 S. Grand Ave., Suite 1700, Los Angeles, Calif. 90071; (213) 229-2996

Total global custody assets	$6,000,000,0
U.S. tax-exempt	$1,500,000,0
U.S. tax-exempt clients	
Account supervisors	
Reports available on-line:	
Monthly transaction	
Asset & liability	

Security Pacific Bank oversaw $6 billion in tot global custody assets as of June 30.

Countries serviced by the global custody netwo are Canada, Chile, France, Hong Kong, Japan, Ma laysia, Singapore, Switzerland, Thailand and th United Kingdom. Sixteen other countries are serve subcustodians. The bank assists clients with foreig tax withholding in all countries where applicable.

Fees are based on clearance and custody fee incorporating subcustodial charges and administra tive overhead.

The client contact is Cathy V. Holsey.

State Street Bank & Trust

P.O. Box 1992, Boston, Mass. 02105-1992; (617) 847-2511

Total global custody assets	$60,300,000,0
U.S. tax-exempt	$27,983,000,0
U.S. tax-exempt clients	
Account supervisors	
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

State Street Bank & Trust Co. oversaw $60, billion in total global custody assets as of June 30.

The United Kingdom is serviced by the globa custody network. Twenty-five other countries a served by a subcustodian. The bank assists client with foreign tax withholding in all applicable cou tries.

Fees are unbundled and are based on asse value, transactions and subcustodian holding cost

Other record-keeping services include interna tional mutual fund accounting, multicurrency pe formance measurement, international securitie lending and consolidated record keeping for work wide affiliates.

The client contact is Frank Antin.

Trust Co. Bank (SunTrust Banks Inc.)

P.O. Box 4655, Atlanta, Ga. 30302; (404) 588-8206

Total global custody assets	$4,172,000,0
U.S. tax-exempt	$24,000,0

Trust Co. Bank (SunTrust Banks Inc.) oversa $4.172 billion in total global custody assets as June 30.

The bank offers a "private label" product, f which State Street Bank & Trust Co. is the prima supplier of the subcustodial network. Twenty-seve countries are serviced by the network. The ban assists clients with foreign tax withholding in countries in the network.

Fees are calculated on net asset value.

The client contact is Seiu Sekimoto.

United States Trust Co.

114 W. 47th St., New York, N.Y. 10036-1532; (212) 852-1000

Total global custody assets	$1,193,000,0
U.S. tax-exempt	$317,000,0
U.S. tax-exempt clients	
Account supervisors	
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

United States Trust Co. oversaw $1.193 billion total global custody assets as of June 30.

Twenty-seven countries are serviced by th global custody network through a subcustodian. Cl ents are assisted with foreign tax withholding as countries in the network.

Fees are asset and transaction based.

Other record-keeping services include advance performance measurement services, daily price and accruals, and investment analytics.

The client contact is Schuyler V. Grant.

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Fixed income performance based on Employee Benefit Bond Fund. Source: SEI

Mergers

Continued from page 25

"a little concerned" the merger might affect services. But that problem never materialized, he said.

The $2 billion New Mexico Educational Retirement Board used Irving Trust as its master custodian prior to the merger, and now is a Bank of New York customer. John E. Young, chief investment officer, termed the merger "generally pretty smooth . . . I think some of the strengths of both banks were combined, and as a result, they probably have a better (overall operation) than before."

Bank of New York officials echo that sentiment. They acknowledged certain merger problems — especially relating to employees' anxieties — but said all issues have been settled. The bank reports new clients, including Bank of England, which this year hired Bank of New York for securities lending, said Thomas J. Perna, executive vice president.

For the year ended June 30, Bank of New York reported $722 million in new domestic master trust business from 11 U.S. tax-exempt institutional clients and $2.003 billion in new domestic master custody business from eight clients.

Merging custody operations involved settling staffing issues; informing customers about events and asking for their input on related issues; and choosing systems. Although third in priority, selection of the reporting/accounting systems was the easiest and first accomplished, said Mr. Perna.

For master trust, bank officials decided to blend systems of Bank of New York and Irving Trust, which had been based on the same technology. Master trust and global custody systems are tied together and are modules of one large system, said Mr. Perna.

No jobs were eliminated in master trust/global custody. In fact, the area now has about 25 more staffers than at the end of 1988, said Curtis A. Yamaoka, senior vice president. Staff defections did occur at the time, mostly from Irving Trust, he said.

The merger prompted no service disruptions, Mr. Yamaoka said.

For various reasons, the Boatmen's-Centerre merger was easier, and the remaining bank — now with $2.2 billion in tax-exempt master trust assets and $16.3 billion in tax-exempt master custody assets — lost no time attracting new customers.

In each of the first two months after the merger was official, Boatmen's landed a significant new customer. "And the momentum has continued from there," reported Anthony Brown, manager of Boatmen's master trust custody administration.

For the year ended June 30, Boatmen's reported new domestic master trust business of $303 million from three U.S. tax-exempt institutional clients and $1.291 billion in new domestic master custody business from six clients.

The more than $5 billion Public School Retirement System of Missouri had been a customer of Boatmen's before the merger with Centerre. After the merger, the fund continued with Boatmen's and experienced "no change at all," said David W. Mustoe, the fund's executive secretary. The fund uses Boatmen's as its master custodian and as an investment manager, and generally likes the bank's operations, said Mr. Mustoe.

In Mr. Brown's view, "everything went smoothly" with the merger. Reasons he cited were the "two organizations match very well; the strengths on both sides" were recognized and addressed right away; and personnel issues were resolved quickly.

About a month after the merger, "we physically moved everyone together. There was no long, protracted period of people guessing how they would fit in," Mr. Brown said.

(Boatmen's Trust developed out of the broader merger of Boatmen's Bancshares Inc., which owned Boatmen's National Bank of St. Louis, and Centerre Bancorp., parent of Centerre Trust Co. The merger of the trust division of Boatmen's National Bank and Centerre Trust Co. created Boatmen's Trust.)

Moreover, the integration of systems also went smoothly. In the global custody area, the bank adopted Centerre's system because Boatmen's hadn't had a global custody operation. Centerre's master trust system also prevailed following a "careful analysis," said Mr. Brown.

For Boatmen's, the biggest issue was the name change, said Mr. Brown, who had joined Centerre shortly before the merger. Prior to the merger, Centerre's custody market share had exceeded Boatmen's.

To trumpet the new name, the bank advertised, visited clients, consultants and prospective clients and used direct mail. "It was not a hard sell. When everyone saw the players were the same and nothing had changed, they were very comfortable with that." ■

Insurer hires noted execs for new unit

LOUISVILLE, Ky. — Capital Holding Corp., a publicly owned insurance company in Louisville, formed a foreign currency investment advisory and asset management company.

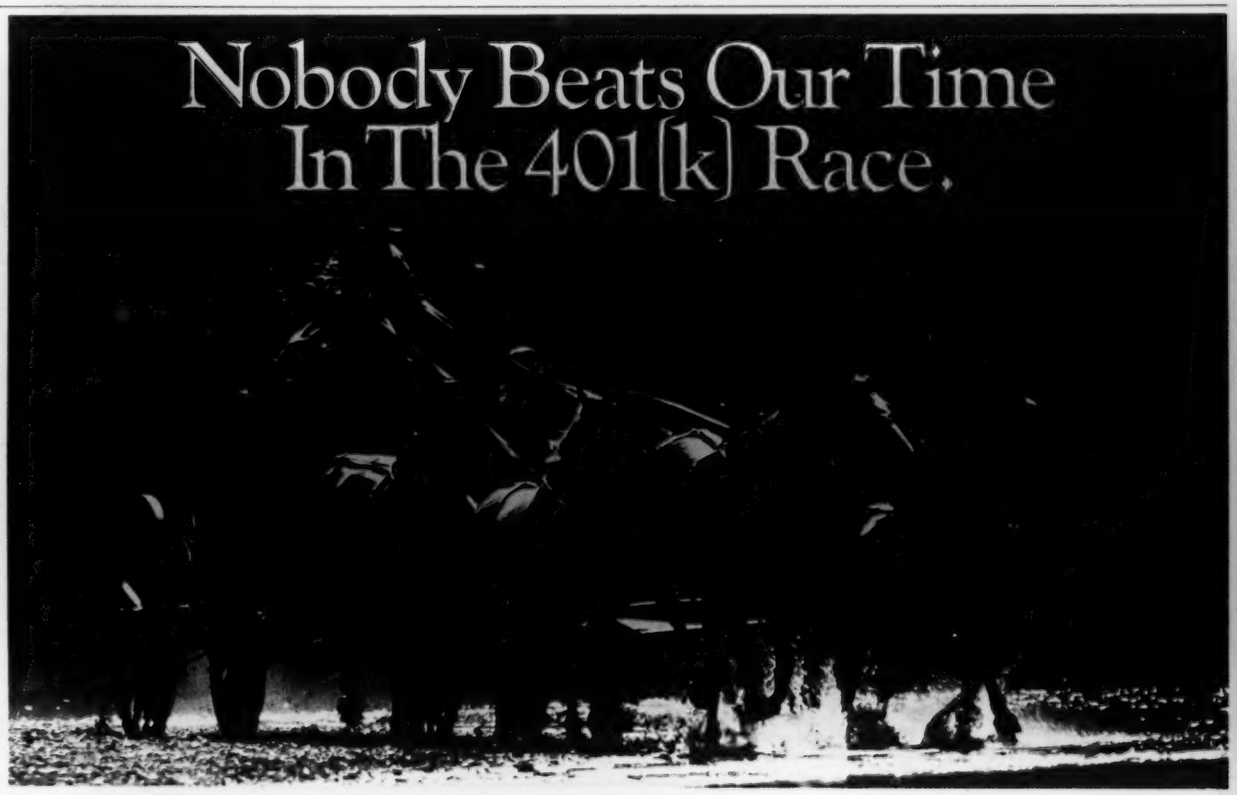
The firm, Capital Holding Currency Advisors, will be managed jointly by Andrew J. Krieger and Jonathan M. Berg.

Mr. Krieger is a well-known currencies trader, who, in 1987, was reported to have earned more than $300 million in trading profits for Bankers Trust Co., New York. Since 1988, he has been the president of Krieger Investments Ltd., an asset management and advisory firm in Englewood Cliffs, N.J.

Mr. Berg previously was with Bankers Trust Co., New York, where he had a variety of senior management positions, including managing director and head of the Capital Markets Group-North America and deputy head of the Capital Markets Group-Global.

Based in Englewood Cliffs, N.J., Capital Holding Currency Advisors will specialize in currency options for institutional investors, central banks and wealthy individuals. The firm also will manage an undisclosed portion of Capital Holding's non-traditional investment portfolio. CHCA will be part of Capital Holding's Accumulation and Investment Group.

Mr. Berg said the firm will target clients in Asia and Europe. ■



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Custody

Continued from page 25

assets grew 10%, to $1.04 trillion from $944 billion, while master custody assets grew only 1.8%, to $872.3 billion from $856.5 billion.

Several bank executives, however, said this is contrary to what they are seeing among current and potential clients.

Corporate defined benefit plans, which tend to have a master trustee, have peaked, while growth continues among defined contribution plans, public pension funds, endowments and foundations, which usually have a master custodian.

"Clearly, most corporations have hired master trustees," Ms. Reynolds said.

"The business is clearly more mature."

"The growth is in the defined contribution market," Mr. Carty added.

Also, public funds are continuing to grow rapidly, Mr. Carty said. ■

Global custodians ranked by U.S. tax-exempt assets*

	$ mils.	Client number
State Street	27,983	76
Chase Manhattan	23,900	41
Northern Trust	12,680	86
Boston Safe	10,401	51
J.P. Morgan	6,000	22
Mitsubishi	5,098	27
Bank of New York	3,500	20
Bankers Trust	2,513	62
Bank of America	2,000	10
Mfg. Hanover	1,500	26
Security Pacific	1,500	32
Citibank	1,400	9
First Nat'l/Chicago	1,257	3
Harris Trust	940	35
Barclays Bank	500	3
NBD	500	n/a
Morgan Stanley	489	5
Continental Bank	400	6
Brown Brothers	238	5
First Nat'l/Boston	200	3
First Trust	75	27
Total	103,074	

Banks with third-party global networks

	$ mils.	Client number
Mellon Bank	4,400	na
First Wachovia	1,000	na
CoreStates Bank	700	7
NCNB Nat'l Bank	500	na
Norwest Bank Minn.	400	na
United States Trust	317	45
Boatmen's Trust	311	na
Man. Nat'l/Detroit	275	na
First Interstate/Calif.	240	na
Trust Co. Bank	24	2
Total	8,167	

Global custodians ranked by total custodial assets worldwide*

Firm	$ millions
Chase Manhattan	114,000
Brown Brothers Harriman	113,580
Midland Securities	85,600
Citibank	78,000
Barclays Bank	75,000
Manufacturers Hanover	70,000
State Street Bank	60,300
J.P. Morgan	45,000
Bank of New York	24,200
Boston Safe Deposit	21,204
Northern Trust	21,000
Bankers Trust	15,329
Chemical Bank	14,041
Morgan Stanley Trust	13,500
Harris Trust	12,000
Bank of America	10,500
First Nat'l/Chicago	7,271
Mitsubishi	7,200
Security Pacific	6,000
Mellon Bank	4,400
Trust Co. Bank	4,172
First Nat'l/Boston	3,600
Continental Bank	2,600
United States Trust	1,193
First Wachovia	1,000
First Trust	800
CoreStates Bank	700
NBD Bank	500
NCNB	500
Norwest Bank Minnesota	400
Boatmen's Trust	311
Manufacturers Nat'l Detroit	275
First Interstate/California	240
Total	814,416

* may include some double-counting because of subcustodial relationships

Survey

Continued from page 25

finished fourth in personnel with a 4.43.

Reporting — a monthly record of transactions and account activity provides plan sponsors with an accurate picture of the portfolio — is one of the most crucial areas in the master trust business. Mellon was No. 1 in overall reporting with a 4.19, followed by First Wachovia Corp. with 4.1 and Boston Safe Deposit and Trust Co. with 4.03. Four banks tied at 4 — Manufacturers National, National Bank of Detroit, U.S. Trust and Northern Trust.

In the other services category, Manufacturers National and U.S. Trust topped the list, each with a 4.5. Following were Mellon Bank, with 4.43; Bankers Trust Co., New York, with 4.27; and Northern Trust, 4.12.

Plan sponsors were asked to rate several criteria in order of importance in selecting a global custodian. Reporting capabilities was ranked at the top, followed by responsiveness, network, technology (automation), personnel and fees.

As in the master trustee category, the majority of global custodian clients responding (68.5%) said global custody fees were average, while 21.3% classified fees as high and 10.2% said fees were low.

Ranking after Mellon in overall global custody satisfaction were Northern Trust with 3.7, Chase with 3.6 and Bankers Trust and Mitsubishi Bank, each with 3.4.

In the areas of country coverage, which usually means the number of countries in which the bank can settle trades, and accuracy of reporting, Mellon ranked top in client satisfaction with ratings of 4.11 and 4.

Mellon was followed in country coverage satisfaction by Northern Trust, 4; Mitsubishi, 3.75; and Chase, 3.69.

In the accuracy of reporting category Mellon was followed by Chase with 3.73; Northern Trust, 3.68; and Harris Trust and Savings Bank, Chicago, and National Bank of Detroit, each with 3.67.

Mellon also topped the list in customer satisfaction in the areas of tax reclamation, 4; performance settlement, 4.1; dividend and interest posting, 4.2; and foreign exchange capability, 4.22.

Mellon was followed in the tax reclamation area by Northern Trust, 3.57, and Harris Trust, 3.33.

Northern Trust was second in the performance settlement category with 3.9; Chase was next with 3.67. ■

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Software can help cut through manager haze

LaPorte package a powerful yet flexible tool

By Stephen L. Kessler

In recent years, increasingly powerful manager search and evaluation, asset allocation and performance measurement capabilities have been made available to institutional investors through the publishing of sophisticated software packages.

This series will evaluate seven manager search packages, some of which offer additional capabilities as well: LaPorte Asset Allocation System, Burlington Hall Asset Management Inc.; M-Search™, Mobius Group; PSN PC, Plan Sponsor Network Inc.; CADENCE MicroUNIVERSE and MicroADVISOR, CDA Investment Technologies Inc.; CAMS II+, Performance Analytics Inc.; and WealthBuilder, Reality Technologies Inc.

Whether the investigator is seeking to identify suitable managers, to compare current managers to others in their peer group or just education, these programs offer substantial help.

When evaluating this software, the key considerations are:

- The universe covered should be extensive, allowing for a real choice of alternatives.
- Performance data should extend back as far as possible.
- Data should be verifiable.
- The program should either allow for easy data manipulation to suit the investigator's criteria or be downloadable to a spreadsheet program for the same purpose.
- Additional managers whose performance is known should be easily added to the data base for comparison with those supplied.
- Performance data should be clearly identified by type of portfolio and whether it is portfolio performance of asset class only, unadjusted for the effects of cash.
- Qualitative data should be easily available and searched for on a relational basis. Examples are items such as geographic areas served; minimum account size and fees; errors and omissions insurance; quality of the composite, firm style emphasis, philosophy and investment decision-making process; additions or losses of clients, dollars and professional staff over time; key investment officer information; and other information typically found in a search questionnaire.
- The program should be easy to use, have good quality graphics and be priced to offer good value.

The first program we'll look at is Burlington Hall's LaPorte Asset Allocation System, which also should have "manager search and evaluation" in the title.

LaPorte is two complete packages in one. It starts with a powerful manager screening section that allows for the maximum in flexibility. It is available as a bare-bones product into which users can load their own data on managers of all types.

Alternatively, users can purchase one or more of three different data bases offered by Burlington Hall: 2,600-plus mutual funds from Investment Company Data; more than 250 commodity pools and advisers provided by Managed Account Reports; and 400-plus investment advisers with 800 portfolios provided by Higgins Associates of Cambridge, Mass.

Most of the advisers are independent firms, but there is a good sprinkling of banks and insurance companies. The portfolios include equity, balanced, fixed income, international equity and fixed income as well as real estate managers. The mutual fund and commodity data are monthly, while the investment advisory firms report quarterly.

For comparative purposes, the mutual fund data can be converted to quarterly and imported to the same report as the others. All performance files can be exported to a spreadsheet.

The program offers intelligent methods for sorting managers, allowing breakdowns by any combination of relative universe ranking, absolute performance, alpha, beta, Sharpe ratio (measure of the added return gotten for each added measure of risk taken), minimum account size, style and more over any chosen time frame.

A significant strength is LaPorte's ability to import local companies for which data can be made available to the user but is missing from the extensive data base. The major criterion for inclusion in the Higgins data base provided to Burlington Hall is the acceptance by the manager of minimum accounts of $5 million or less.

LaPorte doesn't have a performance module, which would allow time-weighted performance calculations on an existing portfolio. But performance can be compared to a user-defined universe if the advanced features option is purchased.

Universes are created on the fly by the program and can be as broad or specialized as desired.

For example, mutual funds can be compared, graphically, to the mean Sharpe ratio of all bank, insurance company and independent managers over several running three-year periods as well as the latest year and eight years. Each fund's differential in Sharpe ratio can be plotted within a universe floating bar, and the major percentile ranks can be specified below a graph.

None of the other programs examined will allow this kind of flexibility in graphics or numerical analysis covering multiple types of managers — such as commodity pools, real estate bank pooled funds and insurance company fixed-income managers — in one fell swoop.

The program's own graphics can be customized even further by a seamless interface into Harvard Graphics.

On the asset allocation front, the program performs quite well. Using the Markowitz model — which seeks the optimum combination of assets to minimize variances of return for a given return level — the user can select individual investments or choose among 40 indexes to optimize based on past performance or independent choices of risk, return and correlation forecasts. Single or multiple constraints can be specified. Graphics are high quality, and the reports can be customized.

This is the first of a series evaluating personal computer software packages designed for manager selection and performance and asset allocation. The software was evaluated — and the series written — by Stephen L. Kessler, a broker-consultant with Dain Bosworth Inc. in Bellevue, Wash.

Although historical manager analysis is based on actual data, future estimated performance is derived from a random selection of past performance, assuming a log normal return distribution. Holding periods may be set from one to 99 months.

The data provided go back to 1978, but the program will accept up to 50 years of user-specified data, a particularly useful tool for looking at long-run risk premiums.

The program also includes a word processing capability to generate customized letters by pulling performance, risk tolerance and asset allocation data from the studies being run and integrating them in the body of the letter for up to 10 participants at a time. This can be particularly useful for advising participants in a 401(k) plan, where each person has a different risk tolerance.

The program has some shortcomings, particularly in the qualitative area of manager evaluation. The manager data base is not as extensive as some might like and includes some money managers with a mixture of hypothetical and actual performance not clearly identified as such. Background information on the managers is limited and insufficient for due diligence.

Although menu driven, the program is awkward to learn but simple to use. Add unlimited technical support from LaPorte and the program becomes a very powerful tool with extreme flexibility.

The program will run on any IBM PC with DOS 3.0 or above but can be aggravatingly slow unless the system has 80286 or 80386 microprocessor with math chip.

Fast hard drive access time also is recommended. The program uses three megabytes of storage, while the mutual fund and investment adviser data can each take as much as 10 megabytes more.

LaPorte's basic price is $1,975 annually, with the advanced feature option adding $1,000. Mutual fund data cost $695 annually. Investment manager data cost $2,500 per year, and commodity pools are $195 a year. Commodity trading adviser data also is available for $6,000 a year.

LaPorte is not a consultant in a box, but it's a good starting point. ■

LaPorte Asset Allocation System
Burlington Hall Asset Management Inc.
126 Petersburg Road
Hackettstown, N.J. 07840
(201) 852-1694
Richard Oberuc, president

U.K. funds still shunning real estate, fixed income

GREENWICH, Conn. — British pension funds have reduced their allocations to fixed income and equity real estate investments in the past year and expect to reduce them further by 1993.

During the next three years, however, the U.K. funds expect to boost their non-U.K. equity investments by 4.4 percentage points to 24% of assets.

The latest Greenwich Associates survey of U.K. pension funds shows they reduced fixed-income commitments to 8.5% of assets in 1990 from 10.1% in 1989 and 12.8% in 1988.

U.S. pension funds, by contrast, have 35.3% invested in fixed-income securities, according to Greenwich Associates.

The real estate equity commitment of U.K. pension funds dropped to 10% in 1990 from 11% in 1988, and is expected to drop further to 8.7% of assets by 1993. Rodger Smith, partner at Greenwich Associates, said the real estate equity commitment once was as high as 20%.

The rate of return expectations explain the reduction in real estate investment, Mr. Smith said. "They expect 10% from property, more than 10% from the short-term money market, and considerably more from other types of investment, such as equities.

"But while the reason may be evident, we wonder whether it is mainly a reflection of pessimism about the short-term outlook for property, as opposed to the kind of long-term view pension schemes need," Mr. Smith said.

Despite the declines in allocations to fixed income and real estate equities, U.K. pension funds remain the most diversified among the pension systems studied by Greenwich Associates.

For example, 96% of U.K. pension funds are investing outside the United Kingdom compared with just 36% of pension funds in the United States. In addition, half of the U.K. pension funds invest in venture capital, a far higher percentage than in the United States.

The U.K. funds have, on average, 21% of their assets invested outside of the United Kingdom, and expect that to rise to 25% by 1993. U.S. funds, on the other hand, have only 3.7% of their assets invested outside the United States. Canadian funds have 8.9% invested outside their country, close to the current limit of 10% set by law.

Indexing is growing more slowly in the United Kingdom than in the United States, according to Mr. Smith. Indexing of U.K. equities among pension funds actually declined to 8.6% of assets in 1990 from 9.1% in 1989, the Greenwich survey shows.

The reason, according to Mr. Smith, is partly because indexing fees in the United Kingdom are four or five times higher than indexing fees in the United States. "There are two frictional drags on matching an index — transaction costs and fees; with fees high, there's no way an index fund can keep up with the index it follows," he said.

While U.K. pension funds are diversified across asset classes, they might not be diversified sufficiently within asset classes, Mr. Smith said.

The number of managers used by the average British pension fund has increased to three from 2.3 seven years ago, but 54% of the fund still use only balanced managers, 13% use only specialty managers and 28% use both balanced and specialty managers.

Among the very large funds, however, those with assets totaling more than $1.9 billion, 39% use specialty managers only and 17% use balanced managers only.

While 13% of all funds expect to hire a specialty manager, only 8% expect to hire a balanced manager.

A greater percentage of U.K. pension funds than U.S. or Canadian pension funds uses consultants.

In the United Kingdom, 79% of funds use consultants compared with 61% in the United States and 51% in Canada.

Pension fund executives in the United Kingdom earn less than their U.S. or Canadian counterparts. The average salary in the United Kingdom was $64,860 in 1990 compared with $81,216 in the United States and $79,524 in Canada.

Global asset mix

Type of investment	U.K. assets	U.S. assets	Canadian assets
Domestic equities - active	45.3%	29.3%	28.7%
Domestic equities - passive	8.6	14.1	2.7
Domestic fixed-interest securities	9.6	35.3	35.9
Overseas investments	21.0	3.7	8.9
Real property	10.0	5.2	10.0
Cash/short-term investments	5.4	6.9	6.5

Note: Percents are pound weighted
Source: Greenwich Associates, Greenwich, Conn.

An about-face for FDIC

Chairman questions pass-through coverage for BICs

By Fred Williams

WASHINGTON — The heat is on bank insurance contracts, even as issuers double their share of the guaranteed investment market.

In a significant change in direction, FDIC Chairman L. William Seidman questioned the continuation of pass-through coverage for BICs.

"It is time to consider changing the law," Mr. Seidman said in written testimony to the House Committee on Banking, Finance and Urban Affairs.

"The (Federal Deposit Insurance Corp.) might be moving toward becoming the insurer for the nation's pension programs," said Mr. Seidman. "The public policy implications of this . . . are not attractive, and the risk inherent in the current situation suggest limitations are in order."

In a preview of the Bush administration's position on deposit insurance Treasury Undersecretary Robert R. Glauber, testified that limitations on pass through insurance may be required.

He said deposit insurance reform "requires careful consideration of limitations on 'pass-through' accounts, including brokered deposits, pension plan investments, and bank investment contracts."

"These accounts all share the ability to attract massive amounts of funds into the umbrella coverage of the federal safety net," he said, which suggests the need for limiting the number of insured $100,000 accounts.

L. William Seidman thinks the law on pass-through coverage may need to be changed.

The Treasury Department's deposit insurance study is expected to offer a comprehensive review of the deposit insurance program and recommendations by the end of 1990, said Mr. Glauber.

Mr. Seidman's comments came only days after Rep. Henry B. Gonzalez, chairman of the House Banking Committee, said pension funds should not be entitled to receive federal insurance of $100,000 per participant (*Pensions & Investments*, Sept. 17).

And at the same time, Senate Banking Committee Chairman Donald W. Riegle Jr., D-Mich., announced plans to introduce a deposit insurance reform bill designed to help resolve problems of federally insured depository institutions by strengthening capital levels, recapitalizing where necessary, and bringing banks under tighter regulatory scrutiny.

BIC market leaders

BankAmerica
Bankers Trust
Chemical Bank
Citibank
First Chicago
Manufacturers Hanover
Morgan Bank
Union Bank of Finland
Union Bank of Switzerland
Yasuda Trust
SeaFirst
Washington Mutual

The Senate proposal also includes provisions strengthening the Financial Institutions Reform, Recovery and Enforcement Act in the area of brokered deposits and other deposits such as BICs.

According to a Banking Committee statement, Sen. Riegle's bill "strengthens and expands FIRREA's restrictions on brokered deposits, which prohibited troubled institutions from accepting brokered deposits without FDIC approval. While FIRREA covered only deposit brokers and money desks, the bill also will cover other entities that make large deposits in an agency capacity (e.g. mutual funds and pension funds) and receive $100,000 in deposit insurance coverage for each investor."

The apparent shift by the FDIC came as a surprise to insurance and banking industry officials gearing up for another legislative effort to remove pass-through coverage from BICs.

Gary Hughes, chief counsel at the American Council of Life Insurance, said Mr. Seidman's statement "undoubtedly is one of the most significant developments yet."

Hugh Forcier, partner in the Minneapolis law firm of Faegre & Benson and representing Washington Mutual Savings Bank, Seattle, a leading BIC issuer, said Mr. Seidman's comments "represent a change from what he said previously."

He said it is unclear what the impact of the change will be in view of current legislative efforts to reform deposit insurance.

"It could be that he wants to put into law what they found to be the fact, that people have been saying only the most creditworthy institutions' BICs are being purchased . . . and that to have pass-through insurance you may have to be rated as investment grade. We don't know what he means at this point," Mr. Forcier said.

The flurry of activity and attention being given to the banking industry and pass-through coverage on BICs comes as new research indicates bank contracts in force doubled from 1988 to 1989.

In what might be the first comprehensive study of the BIC industry, commissioned by the ACLI to describe the scope and nature of bank activity, the survey found the volume of outstanding BICs to be approximately $13.6 billion at the end of the first quarter of 1990.

That represents about 8% of the $175 billion guaranteed investments at the time, and is double the 4% BIC market share in 1988 when the total was nearly $150 billion.

According to the survey, the BIC business is concentrated in about a dozen banks, with five issuing 64% of the total and another five issuing 14%.

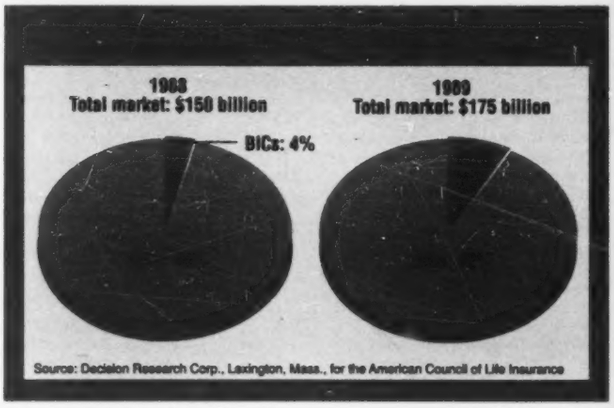
The survey found most high-credit banks claim pass-through coverage "has no effect on their marketing" and matters only to some of the smaller banks that are not major issuers.

"Bankers reported that sophisticated (plan) sponsors have become increasingly aware that the creditworthiness of the issuing institution is much more important than FDIC coverage," the report said.

Bankers also said if FDIC coverage were rescinded for BICs, their rates would improve by 15 basis points.

Other major findings in the survey, prepared by Decision Research Corp., Lexington, Mass., which interviewed 40 banks, include:

- The average BIC contract is $10 million to $30 million for larger banks and $1 million to $13 million for smaller banks.
- The average maturity for BICs is three years.
- Banks see the overlap with insurance companies in the three- to five-year range.
- None of the banks has a large staff for BIC operations — the largest was 10 people — but the banks are usually free to draw on other bank resources to construct, sell and service the contracts.
- Three-fourths of respondents said banks would increase their market shares.
- Because bankers see BICs primarily as a source of funding, banks will back away from the market if the rates are not competitive.


1988
Total market: $150 billion
1989
Total market: $175 billion
BICs: 4%
Source: Decision Research Corp., Lexington, Mass., for the American Council of Life Insurance

Jason Psome, managing partner with the consulting firm of Brentwood Asset Advisors, Santa Monica, Calif., said while BICs have gained market share so far, the volume has fallen off dramatically this year, primarily because of concerns over the financial problems facing the banking industry.

"We don't see the BIC volume anywhere near where it was last year. In my opinion, banks are doing maybe half what they did at this same time last year," said Mr. Psome.

"The reason is the stigma attached to domestic lending at the commercial bank level, particularly in the deterioration of the domestic real estate market."

"It's not that we feel the banks are in any way in danger of failing, it is just why lose sleep over it when you can buy an AAA insurance carrier whose rate is likely to be better anyway." ■

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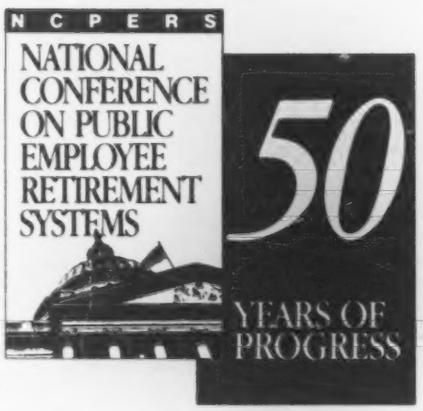

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Commissions

Continued from page 2

kerage commissions, and most frequently use them to purchase consulting services (42.4%) and information and research services (25.6%). Pension executives directed 25% of their commissions in 1989, up from 10% in 1987, Callan found.

Also, use of commission refund programs, which rebate hard dollars to pension plans, has soared in the past two years. More than 30% use such programs, up from 16% at the end of 1987.

Clearly, the Callan survey suggests pension executives do not think trading costs are very significant. Only 17.4% of pension executives believe pension fund directed brokerage harms money manager performance. In dramatic contrast, 63.2% of managers think their performance is hampered by trades directed by pension executives.

Fred G. Weiss, vice president-planning & investment development, Warner-Lambert Co., Morris Plains, N.J., doesn't believe performance is hampered. In fact, that's what money managers have told him. "Every money manager swears up and down that (directed brokerage) won't affect performance."

Callan officials suggest managers might be using trading costs as a scapegoat for why their strategy or style has underperformed the market in recent years, or might be subject to brokers "talking up" transaction costs.

Also, managers lose out when they have to share a portion of the soft dollars with pension executives, an increasingly common practice. Managers might be trying to keep more of the soft-dollar pie, Mr. Brunke suggested.

Callan officials admit pension executives are further removed from the trading process, and aren't likely to increase their scrutiny of soft-dollar costs short of additional regulatory pressure.

Some investors do think directed brokerage can harm investment performance. Of those who do, 64.1% of pension executives and officials of managers believe poor execution impairs returns.

Pension executives think average performance will suffer 16 basis points, lower than 23 basis points two years ago, while managers believe performance will decline 25 basis points, down sharply from 40 basis points.

Despite the impact on performance, most pension executives and money managers examine commission costs only instead of total transaction costs, which include market-impact costs of executing trades. Market-impact studies used by both plan sponsors and managers frequently indicate execution costs are far cheaper than commission costs.

Callan's survey, for example, reveals median and mean market impact costs for pension executives of 1 cent per share and 2.6 cents per share, respectively — well below the levels of 6 and 6.6 cents per share cited for commission costs. Pension executives reason, "If it's only a penny or two, why should I measure it," Mr. Brunke said.

The existing measurement systems dramatically understate the costs of trading, said Ted Aronson, partner, Aronson + Fogler, Philadelphia.

Market-impact costs are hard if not impossible to measure, and thus most people throw up their hands, experts agreed. The difficulty in nailing down those costs create justification for pension executives to simply ignore total transaction costs, and focus just on commissions.

But "when everybody gets together, off the record, everybody agrees that trading costs are high," Mr. Aronson said. "It's just very, very expensive to trade."

Mr. Birinyi argued market-impact costs alone run in the neighborhood of 150 basis points-plus a year for actively managed equity accounts. Mutual funds lagged the Standard & Poor's 500 Stock Index by 580 basis points in 1989, he noted. "It can't all have been bad stock selection."

Alan Lebowitz, a deputy assistant secretary in the Labor Department, said the department requires pension executives to examine the reasonableness of fees and commissions charged to plans, but he acknowledged it is hard to measure execution costs. "Clearly, execution is an important part of performance," he said.

Yet pension executives and managers alike have incentives to retain directed brokerage and soft-dollar trades. Services purchased with soft-dollar credits or rebates do not show up on corporate budgets.

"Plan sponsors think they are getting a free ride," said Charles Stephens, president of the National Sponsor Investment Federation and director of investments for the United Mine Workers of America Health & Retirement Funds, Washington.

Pension executives "attempt to use soft dollars as off-balance-sheet financing," Mr. Stephens said. "It's buying them off with their own money."

But without added regulatory pressure, few experts believe directed brokerage or soft dollars will disappear, although there are a few signs the market is moving toward unbundling commission costs.

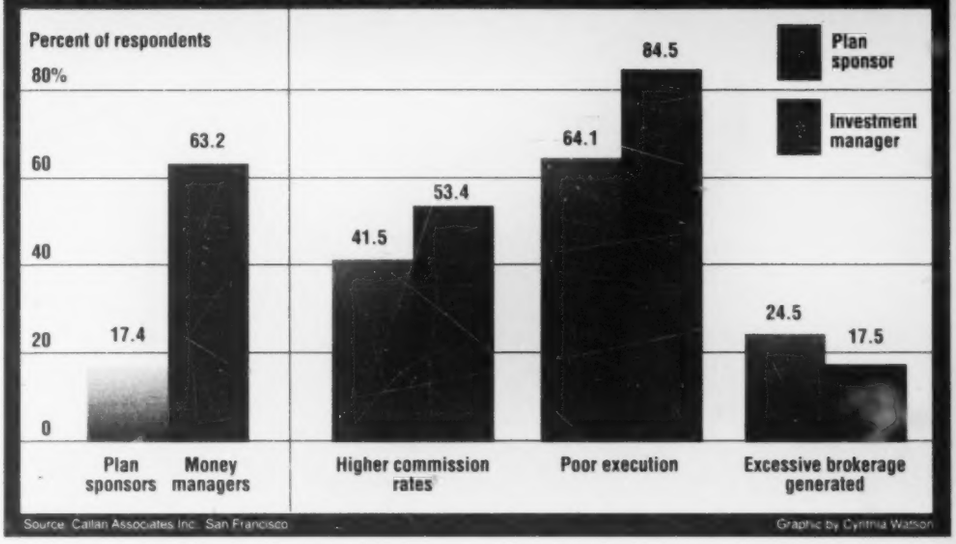
Despite lowering of commissions in recent years, the Callan survey found 42% of pension executives and 37% of managers believe the brokerage industry is overcompensated relative to the added value it provides. What's more, investors expected a 10% reduction in median trading costs this year when market-impact costs are considered.

Pension executives also are far less concerned about lack of liquidity in the market than managers. Nearly four-fifths of pension executives think there is adequate liquidity, compared with 53% of money managers.

Roughly 80% of both pension executives and managers do worry, however, that index arbitrage, a form of program trading, has increased stock market volatility. Only 20% of pension funds permit such trades, while 45.7% of pension executives and 50.3% of managers believe pension funds should not be allowed to use any form of program trading. ■

Does directed brokerage harm manager performance?

Almost one-fifth of plan sponsors and two-thirds of money managers surveyed thought directed brokerage harms investment returns. The chart on the right shows the areas respondents thought were affected.



Source: Callan Associates Inc., San Francisco

Graphic by Cynthia Watson

Deficit

Continued from page 1

is a base rate of $16 per participant charged to sponsors of single-employer plans, but companies with underfunded plans can pay up to $50 per participant.

The $65 million increase means the variable-rate ceiling could go to $70 per participant, Mr. Lockhart said. "We don't want to punish the well-funded plans any."

But the PBGC likely will meet stiff opposition on this front. Congressional Democrats will want the burden of an increased premium to be spread among all single-employer plans, and not fall mostly on the weakest ones, congressional sources said. A flat increase of $2 per participant has been discussed.

The $65 million figure originated from proposed closing of loopholes in the PBGC program urged by Office of Management Budget Director Richard Darman. Those reforms, which include bankruptcy-law changes, were relegated to a study, but the $65 million figure remained intact, one source said. Thus, budget negotiators will have to turn to the PBGC premium for the new revenue.

Business lobbyists, however, oppose any further increases in the PBGC premium, after major boosts in 1986 and 1987. "I do not believe there's any indication that a premium increase is necessary in any way, shape or form," said Mark Ugoretz, president of the ERISA Industry Committee, Washington.

Meanwhile, Congress was trying to hammer out a deal to permit employers to transfer surplus pension assets to retiree health plans while restricting reversions from terminating plans.

Revenue from retiree health transfers are key to that proposal's inclusion in the budget. Because employers would be permitted to make transfers of surplus pension assets to retiree medical accounts, it would — in the short run — decrease their deductions for paying out those health benefits.

Sources said Congress is focusing on a transfer proposal approved by the Senate Finance Committee last year that would permit the transfers for five years — far more generous than the one-year experiment proposed by the Bush administration earlier this year. The five-year proposal would raise $2.05 billion in revenue during the period, according to last year's estimate.

The major issues under discussion include where to set the "cushion" of assets employers would have to keep in a pension plan when a transfer is effected, which would have a major effect on how many dollars could be shifted. Proposals for the cushion range from 125% to 150% of termination liability.

Also, legislators are considering whether to permit transfers up to the entire retiree medical liability for current retirees only, or to limit the transfer to one year's worth of retiree benefits.

In exchange, new restrictions on asset reversions from terminating plans would be imposed. Democrats, led by Sen. Howard Metzenbaum, D-Ohio, and Rep. Bill Clay, D-Mo., have insisted any retiree medical transfer proposal be tied to tougher rules for asset reversions. Sources said the pair have the support of congressional leaders.

Proposals under discussion include increasing the excise tax on reversions to 20% from 15%, and requiring 30% of a terminated plan's excess assets be placed into a replacement plan or given directly to participants. If only 20% of surplus assets were held over, employers would have to give a portion to retirees, under one proposal.

In addition, retirees would be required to be participants in the new plan, even though their benefits had been annuitized, as a way to increase their chances of receiving cost-of-living adjustments. But that would force employers to pay premiums to the PBGC for those retirees. Premiums now do not have to be paid for participants whose benefits have been annuitized.

Even if an agreement of asset reversions and retiree medical transfers cannot be worked out in time, some experts believe an increase in the excise tax will occur, perhaps to the 20% to 30% range.

A recent report by the General Accounting Office said a 39% rate would be justified, while Rep. Peter J. Visclosky, D-Ind., has proposed doubling the excise tax to 30%, as part of a bill that would liberalize full-funding limits.

Meanwhile, the PBGC is seeking a whole host of reforms to the bankruptcy law and pension law, reflecting in part its experiences in dealing with The LTV Corp. and Eastern Airlines Inc.

Eastern's seven plans were terminated two weeks ago under an agreement by which Eastern will chip in $30 million and give the PBGC a $565 million unsecured creditor claim while parent Continental Airlines Holdings Inc. contributed $80.5 million and agreed to cover the plans' remaining pension liabilities. The PBGC estimated Eastern's unfunded pension liability at $720 million.

In a speech to the International Foundation of Employee Benefit Plans in Chicago, the PBGC's Mr. Lockhart fleshed out ideas on what reforms are needed by the agency, which has a $1 billion deficit. The PBGC is expected to unveil a legislative package early next year.

Mr. Lockhart said the agency's "long-term objective must be to operate as a service-oriented, professionally managed insurance company — one that could achieve a stand-alone AAA rating." Critics argue the PBGC is not an insurance company, however, but a social insurance program.

Mr. Lockhart called for switching to more of a risk-related basis for assessing premiums, so companies such as General Motors Corp. — with some unfunded pension liabilities but in otherwise good financial health — would not be slapped with excessive premiums. He said the cross-subsidy from well-funded plans to underfunded plans "may be as high as 50% of total premiums, or about $300 million."

Mr. Lockhart also suggested charging a supplementary premium for contingent benefits such as plant shutdown benefits, which are guaranteed by the agency once they are implemented but are not prefunded by employers. Alternatively, he said "a tighter limit" could be placed on those liabilities.

Plant shutdown benefits have accounted for about one-fourth of the agency's $4.2 billion in liabilities.

In addition, Mr. Lockhart said minimum funding rules should be re-examined and he made several bankruptcy law recommendations, which likely will run into trouble with congressional judiciary panels.

He urged adopting a higher status for the PBGC in bankruptcy situations, requiring employers to continue to make pension contributions while in bankruptcy proceedings, and creating a mechanism to permit the agency to obtain recoveries from a troubled company without resorting to plan termination. ■

Staff reporter Curtis Vosti contributed to this story.